A DICTIONARY GEOGRAPHICAL, STATISTICAL, AND HISTORICAL OF THE...

Digitized by Google

1. Via de' Panzani 1.
Firenze.
Libreria di
ERMANNO LOESCHER
Torino
5. Via Carlo Alberto 5.

15. C. 816

Digitized by Google

Digitized by Google

15. 6 816

Digitized by Google

NEW EDITION OF BRANDE'S DICTIONARY OF SCIENCE, LITERATURE, AND ART, RECONSTRUCTED AND GREATLY EXTENDED TO ADAPT IT TO THE PRESENT STATE OF SCIENCE.

In course of publication, to be completed in TWELVE PARTS, price 5*s.* each, forming THREE VOLUMES, medium 8vo. price 21*s.* each,
—(VOLS. I. *and* II. are now ready)—

A DICTIONARY

OF

SCIENCE, LITERATURE, AND ART

COMPRISING

THE DEFINITIONS AND DERIVATIONS OF THE SCIENTIFIC TERMS IN GENERAL USE, TOGETHER WITH THE HISTORY AND DESCRIPTIONS OF THE SCIENTIFIC PRINCIPLES OF NEARLY EVERY BRANCH OF HUMAN KNOWLEDGE.

EDITED BY THE LATE

W. T. BRANDE, D.C.L. F.R.S.L. & E.

Of Her Majesty's Mint, Honorary Professor of Chemistry in the Royal Institution of Great Britain;

AND THE

REV. GEORGE W. COX, M.A.

Late Scholar of Trinity College, Oxford;

ASSISTED BY GENTLEMEN OF EMINENT SCIENTIFIC AND LITERARY ACQUIREMENTS.

THE progress of science and general knowledge during the twenty-four years which have elapsed since the publication of the first edition of The Dictionary of Science, Literature, and Art, has made it impracticable any longer to render that work a fit representative of existing knowledge, by mere corrections and supplements. It has, therefore, been considered advisable to re-write or re-edit it throughout, and thus to make it an entirely new work. It was the original plan of the Editor to associate with himself writers of admitted competence in the various subjects treated of in the work, and the same system has been followed in the new edition now in course of publication. It is believed that the names of the gentlemen who have contributed to this new edition form a sufficient guarantee that the Editors' efforts to render this work a trustworthy source of information have in no way relaxed, and that the book may therefore be consulted with confidence by all who wish to make themselves acquainted with the principles of each particular science, with the details and history of many, and with the main facts of the multifarious subjects with which it is necessary, at the present day, for all intelligent persons to have some acquaintance.

The plan of the fourth edition differs slightly from that of the former ones, but it is more in accordance with the idea on which the Dictionary was originally planned, and which was expressed in the name at first designed for the work. The intention of the Editor was to call it a 'Dictionary of Scientific Terms,' and to limit its contents to a brief explanation of an exhaustive list of Scientific words; but after mature consideration it was thought desirable, in carrying the design into execution, to limit the number of words included in the Dictionary, and by extending the length of particular articles to make it a readable book, rather than a mere work of reference. In the present edition it has been the object of the Editors, while retaining the readable character of the work, to diminish the extreme length of some of the articles, and to increase their number; but the total quantity of matter contained in the New Edition is considerably increased. It has been found that, in many branches of Science, and especially in Mathematics, Physics, Geology, Mineralogy, and Botany, the omission

London: LONGMANS, GREEN, and CO. Paternoster Row.

Digitized by Google

New Edition of BRANDE's Dictionary,—*continued.*

of terms now in common use, which are requisite for students and collectors, somewhat lessened the utility of the work. A large number of new articles have therefore been added in the present edition, and the whole has been brought, as closely as possible, up to the present time. It is not pretended, and indeed it would be impossible, to include all the terms employed in any branch of science, but it is believed that the omissions are few and unimportant, and that, practically, a sufficient number are included to meet the requirements of the general reader and the non-professional student. The progress of historical criticism, and of the Sciences of Comparative Philology and Mythology, has rendered it necessary to re-write the articles which treated of these subjects, and to add many new ones. In assigning derivations, the Editors have sought chiefly to avoid guess-work; but the principles which have guided them in this part of their task are given in detail in the general preface to the work.

A larger and more legible type has been adopted than that of the previous editions; but although the size of the work has been thereby, and by the large accretion of new matter, extended to three volumes, the price is not increased.

LIST OF CONTRIBUTORS.

General Editor	W. T. BRANDE, F.R.S. &c. late of Her Majesty's Mint, and Honorary Professor of Chemistry in the Royal Institution of Great Britain.
Joint Editor	The Rev. GEORGE W. COX, M.A. late Scholar of Trinity College, Oxford.
Agriculture	JOHN CHALMERS MORTON, Editor of the 'Agricultural Gazette,' &c.
Architecture, History, Language, Logic, Mythology, and General Literature	The Rev. GEORGE W. COX, M.A.
Astronomy, Observational and Descriptive, and Meteorology	E. FRANKLAND, Ph.D. F.R.S. Prof. of Chemistry in the R. Inst. of Great Britain; and J. N. LOCKYER, Esq.
Biological Sciences, comprising Anatomy, Physiology, Zoology, and Palæontology	Professor RICHARD OWEN, F.R.S. LL.D. D.C.L. Superintendent of the Natural History Departments, British Museum; and C. CARTER BLAKE, Ph.D. F.G.S. Foreign Associate of the Anthropological Society of Paris.
Botany and Gardening	JOHN LINDLEY, F.R.S. F.L.S. late Emeritus Professor of Botany in University College, London; and THOMAS MOORE, F.L.S. Curator of the Botanic Garden, Chelsea.
Building and Engineering	G. R. BURNELL, Architect and Civil Engineer, F.R.I.B.A. F.G.S. F.S.A.; and JOHN BOURNE, Civil Engineer.
General Chemistry and Physics	W. T. BRANDE, D.C.L. F.R.S.L. & E.; E. FRANKLAND, Ph.D. F.R.S.; JOHN ATTFIELD, Ph.D. F.C.S. Director of the Laboratories of the Pharmaceutical Soc. of Great Britain; JOHN BROUGHTON, B.S. Assist. in the Chem. Laboratory of the Royal Inst.; W. F. BARRETT, Assist. in the Physical Laboratory of the Royal Inst.; and HERBERT MCLEOD, Demonst. of Chem. in the Roy. Sch. of Mines.
Geology, Physical Geography, and Hydrology	D. T. ANSTED, M.A. F.R.S. F.G.S. &c. Hon. Fellow of King's College, London.
Law, History, and General Literature	HERMAN MERIVALE, M.A. C.B. late Fellow of Balliol College, Oxford.
Law	ARTHUR P. WHATELY, M.A. of Lincoln's Inn, Barrister-at-Law; late Student of Christ Church, Oxford.
Mathematics, Pure and Applied	T. A. HIRST, Ph.D. F.R.S. Professor of Mathematical Physics in University College, London.
Military Subjects	Lieut. H. BRACKENBURY, R.A. F.S.A. Assistant-Instructor in Artillery, Royal Military Academy, Woolwich.
Mineralogy	HENRY WILLIAM BRISTOW, F.R.S. F.G.S. Hon. Fellow of King's Coll. Lond. of the Geol. Survey of Great Britain.
Music	Professor W. POLE, F.R.S. Mus. Bac. Oxon.
Naval Subjects	DENHAM ROBINSON.
Navigation	H. W. JEANS, F.R.A.S. Royal Naval College, Portsmouth.
Painting and the Fine Arts	RALPH N. WORNUM, Keeper and Secretary of the National Gallery.
Political Economy	The Rev. JAMES E. THOROLD ROGERS, M.A. Professor of Political Economy, Tooke Professor of Economic Science and Statistics in King's College, London.
Printing, Bibliography, &c.	R. J. COURTNEY, Superintendent at Messrs. Spottiswoode and Co.'s Printing Office.
Theology and Ecclesiastical Literature	C. MERIVALE, B.D. Chaplain to the Speaker of the House of Commons.

London: LONGMANS, GREEN, and CO. Paternoster Row.

Digitized by Google

M'CULLOCH'S DICTIONARY

GEOGRAPHICAL, STATISTICAL, AND HISTORICAL.

VOLUME III.

Digitized by Google

LONDON
PRINTED BY SPOTTISWOODE AND CO.
NEW-STREET SQUARE

Digitized by Google

A DICTIONARY

GEOGRAPHICAL, STATISTICAL, AND HISTORICAL

OF THE VARIOUS

COUNTRIES, PLACES, AND PRINCIPAL NATURAL OBJECTS IN THE WORLD.



BY

J. R. M'CULLOCH.

NEW EDITION, CAREFULLY REVISED,

WITH THE STATISTICAL INFORMATION BROUGHT UP TO THE LATEST RETURNS

BY

FREDERICK MARTIN

AUTHOR OF 'THE STATESMAN'S YEAR-BOOK.'

IN FOUR VOLUMES.

VOL. III.

LONDON:
LONGMANS, GREEN, AND CO.
1866.

Digitized by Google

LIST OF MAPS.

1. IRELAND . . . . . *to face page* 3

2. RAILWAYS OF IRELAND . . . . . „ „ 13

3. ITALY, NORTH . . . . . „ „ 29

4. ITALY, SOUTH . . . . . „ „ 33

5. NORWAY, WITH SWEDEN . . . . . „ „ 453

Digitized by Google

Digitized by Google

A DICTIONARY

GEOGRAPHICAL, STATISTICAL, AND HISTORICAL.

IONIAN ISLANDS

IONIAN ISLANDS, a collection of 7 principal and many smaller islands on the W. and S. coasts of Greece, forming part of the kingdom of Greece, between the 36th and 40th parallels of N. lat., and between the 19th and 23rd deg. of E. long. The following is the area and population of the seven principal islands, according to a census taken in the year 1860:—

Islands	Area in Sq. Miles	Native Population	Aliens and Strangers resident in the Islands	Total Population
Corfu . .	227	63,649	5,765	69,414
Cephalonia	311	71,482	1,922	73,404
Zante . .	161	38,183	255	38,438
Santa Maura	156	20,572	100	20,672
Ithaca . .	44	11,742	14	11,756
Cerigo . .	116	13,700	42	13,742
Paxo . .	26	5,000	—	5,000
Total .	1,041	224,328	8,098	232,426

These islands—a more minute description of which will be found under their several heads—have, generally speaking, rugged irregular coasts, and a very uneven surface; barren rocks and heath-covered hills forming nearly half their whole contents. Their geological formation is chiefly limestone, disposed in highly inclined strata, intermixed with grey foliated gypsum, and masses of sandstone: and there are few organic remains. The climate is mild, but subject to sudden changes. The *sirocco*, however, makes the heat occasionally oppressive, and the thermometer in summer frequently rises to 32° Réaum. Hurricanes, called here (*borascas*), and earthquakes, are frequent, especially in Zante. There fell, in 1838, 49.04 inches rain. Fine springs of fresh water are abundant on most of the islands. The soil is more favourable to grape cultivation than to the raising of corn; and hence more than ⅔ of the surface available for tillage is laid out in currant-grounds, vineyards, and olive plantations, which are all managed with considerable skill. The land is chiefly in the hands of small proprietors, who let it out to tenants on the *métayer* system, receiving half the produce as rent.

The following table gives the nature of the occupations of the people of the seven islands, according to official returns, in the year 1860:—

Islands	Occupied in Agriculture	Occupied in Manufactures	Occupied in Commerce
Corfu . . .	17,000	2,050	1,600
Cephalonia .	14,268	3,391	1,800
Zante . . .	8,232	1,830	441
Santa Maura	3,250	200	385
Ithaca . .	3,000	300	1,900
Cerigo . .	2,670	750	910
Paxo . . .	400	—	37
Total . .	48,820	8,521	7,073

The number of each kind of live stock was as follows in the year 1862:—

Islands	Horses	Horned Cattle	Sheep	Goats
Corfu . .	3,628	5,125	35,587	19,572
Cephalonia	1,585	1,561	35,635	37,734
Zante . .	3,084	1,232	13,430	16,708
Santa Maura	1,645	1,640	19,500	17,450
Ithaca . .	700	150	7,600	8,000
Cerigo . .	1,160	920	1,950	3,000
Paxo . .	9	12	300	200
Total .	11,811	10,640	113,402	102,664

The manufactures are not important. Soap is made at Corfu and Zante: earthenware, silk shawls, goat-hair carpets, coarse blankets, linen cloths, and sacking are also made to some extent. The islands, however, enjoy a considerable share of the commerce of the Mediterranean, owing to their convenient situation for the supply of the neighbouring continent. They import wheat and other grain; chiefly from Odessa, silks, cotton, and woollen fabrics, cured fish, British hardware, and colonial produce, the total value of which amounted, in 1862, to 1,273,114*l.*; and in the same year, they exported island produce and manufactures (olive-oil, currants, wine, valonia, cotton, salt, soap, and woven fabrics) to the amount of 1,108,519*l.*

The subjoined tabular statement gives the value of the total imports and exports in each of the years 1859, 1861, and 1862.

	1859	1861	1862
	£	£	£
Imports .	1,306,303	1,236,657	1,273,114
Exports .	649,057	901,221	1,108,519

Digitized by Google

Besides sending deputies to the parliament of Greece, and taking their share in the legislative government of the kingdom, the seven islands have each a council of 5 mems., selected out of a list of 10, furnished by the *syncleta*, with whom 5 other active functionaries are nominated by the Greek government to act as an executive body. The judicial power is lodged in a supreme court at Corfu, comprising four ordinary and 2 extraordinary mems.; of the former, two must be native Ionians, and two are appointed by the central government. The ordinary mems. decide common causes, and, in case of difference of opinion, appeal to the extraordinary mems. Subordinate to this court are four tribunals on each island, making 21 in the whole, and under these again are justice-of-peace courts for minor offences and small civil suits. The religious establishment consists of an archbishop and bishops, with the vicars or curates of the Greek church, which is the dominant religion. Full liberty, however, is given to the adherents of the Rom. Catholic and Protestant creeds.

The revenues of the Ionian Islands are principally derived from export duties on oil and currants of 19½ per cent., on wine of 6 per cent., and on soap of 8 per cent. *ad valorem*. The duties on imported merchandise are regulated by a tariff, and all articles not specifically included in it pay an *ad valorem* duty of 7 and 8 per cent. The following is an official statement of the revenue and expenditure of the Ionian Islands, in each of the years 1860–62:—

	1860	1861	1862
	£	£	£
Revenue . .	140,855	153,028	174,754
Expenditure	151,187	154,519	160,644

The chief branches of expenditure are for police, courts of law, and public education—on the latter account 13,828*l.* were expended in 1862. The principal sources of revenue, in the year 1862, were as follows:—

Sources of Revenue	Amount
CUSTOMS.	
Import Duties:—	£
On General Merchandise . . .	35,777
„ Foreign Wines and Spirits . .	2,446
„ Tobacco	4,966
„ Grain	24,327
Total . . .	66,616
Export Duties:—	
On Olive Oil	51,689
„ Currants	28,227
„ Island Wines	754
Total . . .	79,670
Total of Customs Duties . .	148,286
Stamp Duties	13,689
Sale of Gunpowder (Monopoly) . .	769
Receipts for Tariff Dues. Health Office .	4,150
Post Office .	1,401
Executive Police .	2,735
Judicial . .	251
Free Port Warehouse Rents . . .	1,315
Receipts for Public Instruction . .	1,384
Miscellaneous	1,774
Total . . .	174,754

The only coins properly belonging to the Ionian Islands are a silver 3*d.* piece and a copper cent; but those mostly in circulation are Spanish doubloons and dollars and Venetian dollars, received in payment for the produce exported to Spain and Italy. British silver coins are also occasionally met with. The chief standard of weight is the imperial troy pound of 5,760 grains: 24 of these grains make a calco; 20 calci make an ounce, and 12 ounces compose a *libbra sottile*. The *libbra grosse* is equivalent to the pound avoirdupois, and 100 of these pounds make a *talento*. The English yard is the standard linear measure: 5½ yards make a *canico*, 220 yards a *stadio*, and 1,760 yards a mile. The gallon (equivalent to the English gallon) contains 8 *dicotoli*.

The Ionian Islands are frequently mentioned in the ancient history of Greece, but only as detached governments, and not under their collective form. After having repeatedly changed masters during the middle ages they at length became the possession of the Venetians early in the 15th century. They were thenceforward governed by an Italian proconsul; the Italian language was generally introduced into public acts and among the nobles; and Corfu was made the chief arsenal and port of the Venetian navy. In this state the islands continued till 1797, when they were seized by the French, who were confirmed in their possession by the treaty of Campo Formio. Two years afterwards they were taken by the Russians and Turks, and declared an independent republic, under their joint protection. The treaty of Tilsit, in 1807, restored them once more to the French, who retained them till 1814, when they were placed under British protection. The British government, finally, ceded the Ionian Islands to the young kingdom of Greece, the protocol of cession being signed on May 28, 1864. On the 1st of June, 1864, a Greek garrison arrived at Corfu, and the same day the last British troops quitted the islands.

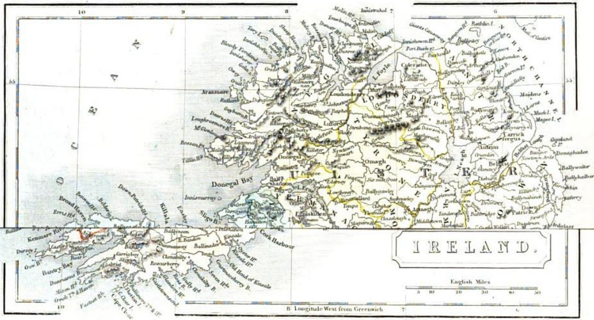
IOWA, one of the United States of N. America, between lat. 40° 30′ and 43° 30′ N., and long. 90° and 97° W., having N. the Minesota territory, E. the states of Wisconsin and Illinois, from which it is separated by the Mississippi, S. the states of Missouri, and W. the Missouri and Sioux rivers. It is shaped like a parallelogram, and has an area of 55,045 square miles. Pop. 674,948 in 1860. Surface undulating, without any high hills or mountains; but a tract of considerably elevated table land occupies the greater part of its centre, dividing the streams that fall into the Mississippi from those that fall into the Missouri. The margins of the creeks and rivers are covered for a considerable way back with large timber trees, the rest of the country being mostly open prairies. The latter, which extends over two-thirds of the surface, are generally covered with luxuriant herbage, occasionally intermixed with hazel thickets and sassafras shrubs, which, in the flowering season, have a rich and beautiful appearance. Soil various, but generally good; consisting in the bottoms of a deep black mould, mixed in the prairies with sandy loam, red clay, and gravel. Iron is abundant; and one of the richest portions of the lead region of the Union is found in the SW. quarter of the state; zinc is met with, and limestone is a prevalent formation. Except in some of the lowest bottoms, the country is salubrious. The cold in winter, though frequently severe, is not injurious; and the heats in summer are said not to be oppressive. Iowa bids fair to become one of the principal agricultural states of the Union. It is well suited to the growth of wheat, Indian corn, and all sorts of grain, and a great variety of fruits and culinary vegetables have been already introduced; it is also extremely well fitted for grazing and dairy purposes. The situation of the state, between two great navigable rivers, affords every

Digitized by Google

Digitized by Google

Ireland. Area 32,500 Sq. Miles   Length 250 Miles   Ireland   Breadth 160 Miles

England & Wales. Area nearly 58,000 Sq. Miles   Length 365 Miles   England & Wales   Breadth 270 Miles



London, Longman & Co.   F. Weller Sculp.

Digitized by Google

facility for the exportation of its various products. The town of Iowa, on the river of that name, in the E. part of the state, is the seat of government; and Burlington, Dubuque in the lead district, Davenport, and various other places, are fast rising into importance. The government is vested in a governor, chosen every four, a senate—numbering 46 in 1864—elected every four, and a house of representatives—numbering 93 in 1864—every two years, by the suffrages of the white male inhabs. of twenty-one years of age. The members of both houses are paid for their attendance. The judges of the supreme court receive each 1,000 doll. a year of salary. The constitution prohibits the creation of any corporation with banking privileges. A university has been established; and ample provision made for the support of public schools. Slavery is not permitted. Iowa was acquired from the Indians in 1832: in 1833, it began to be settled; in 1838 it was erected into a territorial government; and on the 28th December, 1846, it was admitted into the Union. It sends 6 members to the Congress of the United States.

IPSWICH, a parl. and mun. bor., river-port and town of England, cap. co. of Suffolk, on the Orwell, 40 m. S. Norwich, and 63 m. NE. London, on the Great Eastern railway. Pop. of parl. bor. 37,950 in 1861. Area of parl. bor., which includes 12 entire pars. and parts of 6 others, 7,020 acres. The town occupies the foot of a range of hills gradually sloping to the river, which is navigable up to this point by vessels of 200 tons, and is crossed by a handsome iron bridge. The streets are irregularly built, and for the most part narrow; but some of them, which are new or have been recently widened, consist of neat and substantial buildings. On the whole, although containing a great many old-fashioned houses, the town presents a flourishing appearance, and is not only improving, but rapidly extending. It is lighted with gas, and the streets are either paved or macadamised. There are 14 churches, none very remarkable for architectural beauty, and several places of worship for dissenters. The other public buildings are, the town-hall; the shire-hall; the custom-house, a respectable brick structure on the quay; a commodious market-house, erected in 1811; the corn exchange; the co. gaol, said to be very well regulated; the bor. gaol; and the town library, kept, as well as the grammar school, in an old building, once a monastery of Black Friars. The grammar school, which was intended by its founder, Cardinal Wolsey, to form part of a college preparatory to Christ-Church, Oxford, was chartered by Queen Elizabeth in 1565, and rebuilt in 1851, when it was endowed with 8 scholarships and 2 exhibitions. A charity school for maintaining, clothing, and educating 16 poor children, two national schools, and a Lancastrian school, furnish instruction to a great many children; and Sunday schools are attached to most of the churches and all the chapels. An institution for the support of widows and orphans of poor clergymen was established in 1704; and there are several almshouses.

Ipswich formerly enjoyed a considerable share in the woollen and coarse linen trade; but manufacturing is now all but extinct, the trade in this district having been nearly annihilated by the cheaper goods made in the North. The town has no spinning factories; but small quantities of yarn are spun for the Norwich weavers. The principal business of the town consists in the corn and coal trade; large quantities of meal, flour, and malt, being exported to London; while coals are extensively imported, being supplied by the Stowmarket Canal to the W. parts of the co. A general foreign trade of some importance, especially in Norway timber, is carried on. On the 1st of January, 1864, there belonged to the port 52 sailing vessels under 50, and 127 sailing vessels above 50, tons, besides 10 steamers. The gross amount of customs revenue was 24,829*l.* in 1859, 18,390*l.* in 1861, and 19,938*l.* in 1863.

The corporation, the first charter of which was granted by King John, and confirmed by subsequent monarchs, appears to have been, previously to the passing of the Municipal Reform Act, one of the worst regulated and most corrupt in the kingdom, 'every power intrusted to it, its property, its patronage, and its charities, having been used for election purposes.' (Mun. Report.) The present municipal officers are, 10 aldermen, one of whom is mayor, and 30 councillors; the bor. being divided into 5 wards, and having a commission of the peace, under a recorder. Corporation revenue 6,228*l.* in 1862, of which 3,075*l.* were from rates. Ipswich has sent 2 mems. to the H. of C. since the reign of Edward I., the franchise, till the passing of the Reform Act, being vested in freemen (by birth, servitude, gift, or purchase) not receiving alms. The boundaries of the old bor. have not been changed. Registered electors 1,979 in 1865.

The ancient name of the town was *Gyppenswich*, derived from its proximity to the confluence of the Gipping (now converted into a canal) with the Orwell. Its antiquity is proved by the record of its destruction, in 991, by the Danes. In the reign of Edward the Confessor it comprised 800 burgesses. William the Conqueror erected a castle for its protection. Its ancient corporate privileges included admiralty jurisdiction over the river and port of Harwich, which was long subordinate to Ipswich, and an exemption from serving on co. juries or holding co. offices. During the 13th and 14th centuries, the town seems to have been a favourite resort of monks and clergymen, there being at that period not fewer than 21 churches and 6 religious houses.

IRELAND, a large and important island of Europe, in the N. Atlantic Ocean. It is situated to the W. of Great Britain, being separated from the latter by St. George's Channel on the S., the Irish Sea in the middle, and the N. Channel on the N.: the distance from St. David's Head, in S. Wales, across St. George's Channel, to Carnsore Point, in Ireland, is about 47 m.; the distance from Holyhead in N. Wales, across the S. border of the Irish Sea to Dublin, about 55 m.; and the distance from the Mull of Cantire, across the N Channel to the opposite coast of Ireland, about 13½ m. And besides its proximity to England, Ireland has been long politically connected with that part of the empire; and since 1800, when its separate legislature was merged in the imperial parliament, it has formed a principal portion of the United Kingdom of Great Britain and Ireland.

Ireland was called by Aristotle and Strabo *Ierne* (Ἰέρνη), by Cæsar, Tacitus, and Pliny, *Hibernia*, and by Mela and others, *Juverna*; these names being obviously derived from its native or aboriginal name of *Ir*, *Eri*, or *Erin*, whence also the modern name has been deduced. (Cellarii Orbis Antiqui, i. 449.)

Ireland is situated between the parallels of 51° 25′ and 55° 23′ N. lat., and of 6° and 11° W. long. It is of a rhomboidal figure; and though more compact than Great Britain, is deeply indented, particularly on its SW. and N. coasts, with bays and arms of the sea. Its greatest length, between Mizen Head in Cork and Fair Head in Antrim, is about 301 m.; and its greatest breadth, from the W. coast of Mayo to the E. coast of Down, is about

Digitized by Google

182 m.; but in other places the breadth is much less, and there is no part of Ireland above 50 or 55 m. from the sea. Its area is estimated at 31,874 sq. m., of which 985 sq. m. are water.

Face of the Country.—As contrasted with Scotland, or even the greater part of England, Ireland may be said to be a flat country. Still the surface is in most parts much diversified; and even where it is quite flat, the prospect is generally bounded by hills or mountains in the distance. With the exception of the Devil's-bit and Sliebhloom mountains, which run NE. and SW. for about 30 m., intersecting Tipperary, and dividing King's and Queen's Counties, most of the other mountains in Ireland are parcelled out into groups, or form only short chains. The principal group is situated in the SW. corner of the island, in the cos. Kerry and Cork, adjoining the celebrated lakes of Killarney. Gurrane Tual, in Macgillicuddy's Reeks, in this group, the highest mountain in Ireland, has an elevation of 3,404 ft. above the sea. The Wicklow mountains, in the co. Wicklow, on the E. coast of the Island, cover a considerable area: Lugnaquilla, the highest, is about 3,000 ft. above the sea. Some of the glens in this mountain group are celebrated for their beauty. The Mourne mountains, in the S. part of the co. Down, are also of considerable extent; and some of their peaks attain to an elevation of above 2,700 ft. The mountains of Donegal, and those in the N. parts of Leitrim and Sligo, and in the W. parts of Mayo and Galway, constitute a formidable barrier along the NW. and the greater part of the W. coast, and serve at once to attract the moisture brought from the Atlantic, and to break the fury of the storms from that quarter. Some of the Irish mountains are rugged and precipitous; but the greater number are smooth and rounded, admitting of cultivation a considerable way up their sides, and sometimes to their very summits.

The central portion of Ireland consists of a vast tract of level land, broken in some places by a few undulating hill ranges; but for a great part of its extent nearly an uninterrupted flat, extending in some parts, as between Dublin and the Bay of Galway, quite from sea to sea. This great level consists partly of rich cultivated land; but it also comprises a vast extent of bog, partly in Kildare, King's County, and Roscommon, and partly in Meath, Westmeath, and Queen's County. Though not continuous, these bogs differ but little in elevation; and being in many parts separated only by narrow ridges of dry land, they have received the common appellation of the Bog of Allen. Several rivers have their sources in this bog, the highest part of which may be elevated about 280 ft. above the level of the sea. There are several very extensive levels in other parts of the country; and some of them, particularly in Tipperary and Limerick, are not inferior in fertility to any land in the empire.

Ireland is very well watered, having to boast of an unusual number of rivers and lakes. At the head of the former is the Shannon, which, as a channel of internal communication, is not inferior, if it be not superior, to any other river in the United Kingdom. Excepting the Shannon and, perhaps, the Erne, there is no river of any consequence flowing westward. The Blackwater, Suir, Nore, and Barrow, all considerable streams; and the Lee and Bandon, which, though much smaller, have a good deal of commercial importance, pour their waters into the Atlantic on the S. coast; the Slaney, Liffey, and Boyne, discharge themselves into St. George's Channel and the Irish Sea; and the Bann and Foyle have their mouths on the N. coast. The Shannon, after rising at the base of the Culkeagh mountain, in Ulster, runs through the centre of the island, traversing, or rather, expanding into the lakes Allen, Ree, and Derg; and, after nearly insulating the prov. Connaught and co. Clare, falls into the Atlantic, by an estuary of great length and width. This fine river is navigable for 214 m., or throughout its entire course, except about 6 or 7 m. above Lough Allen. (See SHANNON.) The Blackwater or Broadwater is the chief river of Munster: it rises on the confines of Limerick and Kerry, and soon assumes an E. direction, which it generally preserves till about a dozen m. from its mouth, when it turns suddenly S., and falls into the ocean at Youghal harbour. Its course may be estimated at about 100 m. The tide rises as high as Cappoquin, to which point it is navigable. Mallow, Fermoy, Lismore, and Youghal are on its banks. The Suir rises in the Sliebhloom mountains, and has generally a S. course till it approaches the Knock-me-le-down range of hills, which separates its basin from that of the Blackwater. It then turns E., and ultimately falls, together with the Barrow, into the estuary termed Waterford harbour. In a commercial point of view, this is one of the most valuable rivers of Ireland. Vessels of 500 tons come up it to Waterford; besides which city, Carrich, Clonmel, and Cahir are situated on it. The Barrow is the most important of the Irish rivers, after the Shannon. The Nore, its chief tributary, holds its course between the Barrow and the Suir: it has a general direction SSE., running past Kilkenny, Thomastown, and Innistioge. It is navigable for considerable vessels to the latter place, and for barges to Thomastown. The Slaney, like the two foregoing rivers, has in general a SE. course; it rises at the foot of Mount Lugnaquilla, co. Wicklow, and falls into the arm of the sea termed Wexford Haven. Wexford, Enniscorthy, Newtown Barry, and Tullogh, are built on it: it is navigable for barges as far as Enniscorthy. The Lee and the Bandon have both an E. course; the former, on which Cork is situated, is navigable to that city for vessels of from 150 to 200 tons; the Bandon has its mouth in Kinsale harbour. The Boyne, celebrated in Irish history, has been elsewhere noticed. The Liffey is remarkable only as the river on which the metropolis is situated. The Upper Bann, rises near the Mourne mountains, and runs into Lough Neagh, which receives several other large streams. The outlet of this lake is the Lower Bann, which has a N. course to its mouth, 5 m. below Coleraine, to which point only it is navigable for boats, and that with difficulty, from the rapidity of its current. Its salmon and eel fisheries are highly important and valuable. The Foyle, formed by the confluence of several streams near Strabane, runs generally NNE., and discharges itself into Lough Foyle. Strabane, Lifford, St. Johnstone, and Londonderry are on the Foyle, which is navigable to the latter city for the largest class of merchantmen, and to St. Johnstone for barges. The Erne, Arrow, Moy, Kenmare, &c., require no particular notice.

Ireland is more remarkable for the number and extent of her lakes, or, as they are there called, *loughs*, than either Scotland or England, though they must perhaps, in general, yield to those of the sister island in point of picturesque beauty. Lough Neagh, in Ulster, ranks high among the secondary European lakes, inasmuch as it extends over about 100,000 acres. Lough Erne, co. Fermanagh, consists of two considerable lakes, connected by a winding strait, on an island in which the town of Enniskillen is built. Both these lakes are full of islands, some large and thickly inhabited, many well wooded, and the whole so dis-

Digitized by Google

posed, and accompanied by such a diversity of coast, as to form a vast number of rich and interesting prospects. Loughs Corrib, Mask, and the lakes of Killarney, so celebrated for their surrounding scenery, are the other principal lakes. (See KILLARNEY.) The total extent of the Irish lakes has been estimated at 455,399 acres; of which 32,474 acres are included in Leinster, 44,652 in Munster, 183,796 in Ulster, and 194,477 in Connaught.

The term lough is also often applied in Ireland to arms of the sea nearly enclosed on all sides by the land, and frequently forming commodious harbours. Of these, the most celebrated are Loughs Foyle and Swilly on the N., and Belfast and Strangford on the E. coast.

The Irish coast, particularly on the W. and SW., is deeply indented with numerous bays, gulfs, and arms of the ocean, forming some noble havens. Ireland has 14 harbours for the largest ships, 17 for frigates, and from 30 to 40 for coasting vessels, independent of at least 24 good summer roadsteads. The principal inlets of the sea on the W. coast are Donegal, Sligo, Killala, Clew, Galway, Tralee, Brandon, Dingle, Bantry (a matchless bay) and Dunmanus bays, and the estuaries of the Shannon and Kenmare; and on the S. the harbours of Cork (one of the finest in Europe), Waterford, Dungarvon, Youghal, and the bays of Courtmacksherry, and Cloghnakilty. The E. coast has no good harbour; the principal inlets on that side being, exclusive of Loughs Strangford and Belfast, the bays of Dublin, Dundalk, and Dundrum, and Wexford Haven. The chief Irish headlands are, Dunmore Head (which, exclusive of a few insignificant islands, is the most W. point of Europe) and Achil Head, on the W. coast. Cape Clear, on the S., Carnsore Point, on the SE., and Fair and Malin Heads, on the N. A great number of small islands and islets belong to Ireland, which lie chiefly along its W. coast. They are of little importance: the largest are Achil, Clare, N. and S. Arran, Valentia and Rachlin (the *Ricina* of Ptolemy), on the NE. coast.

The *climate* is more temperate and equable than that of other parts of Europe in the same lat. The heat of summer is less oppressive, and the cold of winter less severe; and, when anything like immoderately hot or cold weather takes place, it lasts for a much shorter time. The great defect of the climate of Ireland is excess of humidity: not only is rain more frequent than in England, but the atmosphere, when there is no rain, is largely impregnated with moisture. This circumstance, the result of the insular position of Ireland, and of the prevalence of W. winds for three-fourths of the year, accounts for the greater verdure of the country, and for the trees continuing in leaf much longer than in England. In the driest seasons, Ireland rarely suffers from drought, but the crops are often injured by too much wet. It is a common saying in Ireland, that the very driest summers never hurt the land; for, although the corn and grass upon the high and dry grounds may get harm, nevertheless the country in general gets more good than hurt by it: and when any dearths fall out to be in Ireland, they are not caused through immoderate heat and drought, as in most other countries, but through too much wet and excessive rains. Hence, Ireland is naturally much better adapted for a grazing than for an agricultural country; a peculiarity noticed by Giraldus Cambrensis in his 'Topog. Hiberniæ,' who says that it is more fruitful of pasture than of fruit, and of straw than of grain. '*Pascuis tamen quàm frugibus, gramine quàm grano fœcundior est insula.*' The superiority of Ireland as a pastoral country was well known to the ancients. '*Cæli,*' says Pomponius Mela, '*ad maturanda semina iniqui; verum adeo luxuriosa herbis, non lætis modo, sed etiam dulcibus, ut se exiguâ parte diei pecora impleant.*' (De Situ Orbis, lib. iii. § 6.) It is alleged that the atmosphere is less humid now than formerly: a probable consequence of the cutting down of the woods, and the great extension of cultivation. Were drainage as extensively practised in Ireland as in England, there can be little doubt that the climate would be still further improved; though, from the position of Ireland in respect of the Atlantic, it must necessarily be always distinguished for humidity. The average quantity of rain in a series of years was found to be 35 inches annually in Cork, and 31 in Derry. The changes of the seasons, and of the weather generally, are a good deal more uncertain even than in England; and the business of agriculture is proportionally hazardous. Thunderstorms are less frequent and destructive in Ireland than in Britain. The mean temp. of the N. of Ireland is about 48°, of the middle 50°, and of the S. 52° Fahr. Its range at Dublin has been found to be between 14° 50′ and 81° 50′, the mean being about 49°. Peaches, grapes, and most other southern fruits do not ripen without much care and attention; but the broad-leaved myrtle grows luxuriantly in the S. counties, and the arbutus is not native to any other country so remote from the equator.

The *geology* of Ireland differs greatly from that of England, and in a general point of view rather resembles that of France; Ireland being, like the latter, a basin surrounded by mountains of a primary or transition character. The Mourne mountains, and others in the NE., are composed chiefly of granite, mica-slate, grauwacké, and porphyry, similar to the mountain ranges on the opposite Scottish coast. Granite prevails in the Wicklow mountains, and it is found, together with gneiss, mica-slate, hornblende, quartz, and old red sandstone, in Mayo, and other parts of the W. Clay-slate, felspar, primitive greenstone, and limestone, are the other chief primary and transition rocks. Limestone is a very prevalent formation, it being found over the whole country, except in a few of the N. and W. counties; in many places sandstone protrudes through it in the form of knolls. In the N., the trap-field of Antrim, the largest basaltic formation in Europe, extends over an area of 800 sq. m., and presents, in the Giant's Causeway, &c., the finest specimens of columnar basalt. No tertiary beds, containing shells, like those of the London and Paris basins, have been discovered; but the limestone in most parts abounds with fossil remains. Coal, that most valuable of fossils, is found in the S. and E. The principal coal-field is that of Kilkenny, which rests, like the great coal formations of England, upon mountain limestone; the other coal-fields are those of the cos. Tipperary, Cork, Kerry, Limerick, Lough Allen in Leitrim, Monaghan, and another in Ulster, N. of a line drawn between Dublin and Galway. Little coal is, however, raised, and the produce is also very inferior. Dublin, Belfast, Cork, and all the principal Irish towns, are supplied with coal from Great Britain. Iron is found in many parts of the country; and the great increase of iron-works in the earlier part of the 17th century is said to have been a principal cause of the destruction of forests in Ireland. But these having been exhausted, and coal not having been found of such quality and in such quantity as to supply the deficiency, the Irish iron-works have been almost wholly abandoned. In Donegal and Galway, statuary marble, nearly equal to that of

Digitized by Google

Italy, is found; and the black and grey marbles of Kilkenny are much prized, and exported to a considerable extent. There are copper and lead mines in Cork, Kerry, Wicklow, and other places. Small quantities of gold and silver have been found in Wicklow. Indeed, some stream-works were wrought in the latter co., on account of government, previously to the rebellion of 1798; and it is said that as much gold was obtained as paid the expense. But some mining operations in Wicklow, commenced by government early in the present century, having failed, all attempts to obtain the precious metals have been since entirely abandoned. Copper is the only metal which at present appears to repay the labour and expense of raising it: the ore is mostly sent to Wales to be smelted. Antimony, manganese, serpentine of excellent quality, fullers' earth, gypsum, limestone, slate, with beryls, and garnets, are the other chief mineral products.

The deficiency of good coal in Ireland is less felt as regards domestic than manufacturing purposes. About 2,800,000 acres, or nearly 1-7th part of the entire surface, consists of bogs, which are capable of furnishing an almost inexhaustible supply of peat at very little more expense than that of the labour required in digging it. About 1,576,000 acres of this peat soil are estimated to consist of flat red bog; the remaining 1,255,000, called mountain bogs, lie on the surface of the uplands. The red peat bogs, which form a remarkable feature of the country, are chiefly comprised in the great central plain of Ireland; and the space bounded N. by a line drawn from Howth Head to Sligo, and S., by another from Wicklow Head to Galway, would include the greater portion of the Irish bogs. Unlike the English mosses, they are rarely level, but undulating; and in Donegal there is a bog completely diversified with hill and dale. These bogs consist of moist vegetable matter, containing a great deal of stagnant water: and after heavy rains and fogs, sometimes burst, and inundate or overwhelm the surrounding country. But they vary infinitely in wetness, as also in depth and composition. The extensive bogs in the central part of the island, though separated from each other, have received the common name of the Bog of Allen. The bogs in general rest upon a stratum of blue clay, based on limestone, and are invariably above the level of the sea; their greatest elevation, however, not exceeding 488 ft. Many conflicting opinions have been entertained with respect to the origin of these bogs. It has been contended by some that they are of no great antiquity, and originated in the cutting down of the forests, after the invasion of Ireland by Henry II., or at a somewhat earlier period. It is alleged that the recumbent trees having intercepted and dammed up streams of water with the rubbish carried along with them, the whole became gradually covered with a vegetation of moss, sedgy grass, rushes, and various aquatic plants. But there seems but little foundation for this theory; and it is more probable that the bogs owe their origin to natural causes, and not to a supposititious cutting down of the forests. The English did not, till long after the reign of Henry II., spread themselves over any considerable portion of the country, and could not, therefore, be the agents in any very remote and extensive destruction of its woods, which, in fact, were both numerous and extensive long after the bogs had attained to their present extent. (See Boate's N. Hist. of Ireland, pp. 118–122., ed. 1652.)

The drainage and cultivation of these extensive portions of the surface of Ireland have long been regarded as objects of great national importance, and frequent attempts have been made to show that they might be effected at no very great expense. But there are but few examples in any part of the island, and those under very peculiar circumstances, of successful bog cultivation. The attempts to drain the bogs hitherto made in Ireland have not been very successful; and even had they succeeded, it is doubtful whether the bogs would have produced any considerable return. It is, indeed, by no means clear, supposing them to be quite dried, that they would not, in most instances, be rendered still more worthless than at present. (Wakefield, i. 105.) In those parts, indeed, where bogs are scarce, they are the most valuable properties in the country. In not a few localities they have been wholly cut out; and where this is the case, and other bogs are not easily accessible, the inhabs. have sustained great privations from the want of fuel.

The diversity of soils is not nearly so great in Ireland as in England. It has no stiff clay soils, such as those of Essex, Hants, and Oxfordshire, nor any chalk soils, as those of Hertford, Wilts, and Sussex. Sandy soils are also rare. Loam, resting on a substratum of limestone, predominates in Ireland; and, though often shallow, it is almost every where very fertile. A large part of Limerick, Tipperary, Roscommon, Meath, and Longford, consists of deep fine friable loam, and is, perhaps, not surpassed by any land in Europe. It is not permanently injured by the bad system of culture to which it is subjected, and if kept clean, will yield an almost interminable system of corn crops; and how bad soever the order in which it is laid down to grass, it is in no long time covered with the finest pasture. The deep rich grazing lands on the banks of the Shannon and Fergus are not surpassed by the best in Lincolnshire. A good judge of such matters, Arthur Young, contends that, acre for acre, the soil of Ireland is superior to that of England, though, as the proportion of waste land in the former is much greater than in the latter country, this must be held an exaggerated statement. Had Mr. Young confined his remark to the cultivable land in both countries, it would have been quite correct. In fact, deducting the bogs and mountains, it is certain that Ireland is about the richest country, in respect of soil, in Europe. As a grazing country, Ireland is probably superior to any territory in the old world.

The *flora* and *fauna* of Ireland do not differ much from that of England. The arbutus and myrtle have been already mentioned, and besides these plants, most of those common to Britain are met with. The wild animals do not materially differ from those of England. Wolves formerly infested the country, but they were extirpated under Cromwell. The Irish greyhound, which was of use in clearing the country of these animals, is about 3 ft. in height, of a light colour, and of such strength and courage, that it is said to be more than a match for the mastiff or bulldog: it is now, however, nearly extinct. The numbers of deer have greatly declined with the clearance of the forests, and the progress of cultivation. The native Irish horse is seldom more than 15 hands high, very hardy, and sure-footed: it is used for all kinds of labour. A large blood-horse is reared extensively in Meath, and is to be found in most of the rich grazing counties. The native Irish cattle, a breed with short legs, large bellies, and white faces, have been, to a considerable extent, superseded by the introduction of the Holderness, Staffordshire, and Devonshire breeds, either pure or crossed. As compared with Eng-

Digitized by Google

land, but few sheep are raised in Ireland. The native Irish sheep is small, and covered with nearly as much hair as wool; but it is now uncommon in a pure state, having been crossed with various English breeds.

The value of live stock (exclusive of goats) in 1851 was given by the census commissioners as 27,649,151*l.*, being an increase over that in 1841 of 6,543,343*l.*—equal to 31 per cent.; whilst the excess in value in 1861, compared with 1851, was 5,714,043*l.*—equal to 21 per cent.

In 1841, the value of stock on every 100 acres (exclusive of the larger rivers, lakes, and tideways), was 104*l.*; in 1851 it was 136*l.* and in 1861, 164*l.* In the provinces the value was—in Leinster, in 1841, 123*l.*; in 1851, 151*l.*; and in 1861, 187*l. per* 100 *acres.* In Munster, in 1841, it was 107*l.*; in 1851 it was 132*l.*, and in 1861, 165*l.* In Ulster it was 102*l.* in 1841, 153*l.* in 1851, and 170*l.* in 1861; and in Connaught, 79*l.* in 1841, 104*l.* in 1851, and 130*l.* in 1861.

In the counties the increase in the *average* value of live stock in every 100 acres in 1841, 1851, and 1861, was as under:—

County	Value per 100 Acres			Increased Value between 1841 and 1861
	1841	1851	1861	
	£	£	£	£
Antrim	94	167	172	78
Armagh	113	170	198	85
Carlow	122	159	204	82
Cavan	102	160	187	85
Clare	94	128	163	69
Cork	108	132	165	57
Donegal	73	106	134	61
Down	130	188	204	74
Dublin	138	223	250	112
Fermanagh	93	162	162	69
Galway	67	92	122	55
Kerry	84	111	136	52
Kildare	124	154	185	61
Kilkenny	126	145	188	62
King's	88	110	134	46
Leitrim	92	152	163	71
Limerick	118	168	197	79
Londonderry	101	160	173	72
Longford	88	137	166	78
Louth	119	157	191	72
Mayo	69	82	115	46
Meath	155	183	236	81
Monaghan	118	165	190	72
Queen's	112	134	157	45
Roscommon	88	125	150	62
Sligo	93	146	150	57
Tipperary	106	136	177	71
Tyrone	92	160	168	76
Waterford	119	135	172	53
Westmeath	111	162	193	82
Wexford	131	148	200	69
Wicklow	100	138	165	65

The appearance of the country is, in most parts, indicative of the poverty and depressed condition of the bulk of the pop. Generally speaking, what are called farm-houses and offices in England, do not exist in Ireland: and the aspect of the cottages, which, in the vast majority of instances, are of the most wretched description; the smallness of the fields, which, instead of hedges and ditches, or stone fences, are usually divided by turf dykes; and the badness of the horse furniture, and of the agricultural implements, all impress the traveller with the most unfavourable convictions. But, how mortifying soever the contrast between the excellence of the soil and the state of the people, it is some satisfaction to know that it is less striking now than formerly. In many districts, a considerable advance has been made towards a better order of things; and the spirit of improvement has begun to scatter its seeds and spread its roots in most parts of the country.

The extent of arable land, in square miles, in each of the years 1841, 1851, and 1861, was returned as follows by the census commissioners:—

Provinces and Counties	Extent of Arable Land in Square Miles		
	1841	1851	1861
LEINSTER:			
Carlow County	288	310	310
Dublin ,,	306	304	305
Kildare ,,	557	563	557
Kilkenny ,,	735	723	719
King's ,,	527	527	551
Longford ,,	300	304	312
Louth ,,	280	265	268
Meath ,,	855	846	837
Queen's ,,	535	553	566
Westmeath ,,	571	569	576
Wexford ,,	798	823	813
Wicklow ,,	438	522	560
Total	6,190	6,309	6,374
MUNSTER:			
Clare County	711	854	938
Cork ,,	2,045	2,166	2,214
Kerry ,,	648	963	1,150
Limerick ,,	823	895	910
Tipperary ,,	1,319	1,346	1,366
Waterford ,,	508	511	513
Total	6,054	6,735	7,091
ULSTER:			
Antrim County	806	932	966
Armagh ,,	414	422	430
Cavan ,,	587	619	617
Donegal ,,	614	1,083	1,051
Down ,,	803	818	821
Fermanagh ,,	452	526	540
Londonderry ,,	497	554	615
Monaghan ,,	447	448	447
Tyrone ,,	704	839	853
Total	5,324	6,241	6,340
CONNAUGHT:			
Galway County	1,161	1,358	1,557
Leitrim ,,	390	420	451
Mayo ,,	777	1,013	1,118
Roscommon ,,	688	587	717
Sligo ,,	454	466	516
Total	3,470	3,844	4,359
Total of Ireland	21,038	23,129	24,164

Population.—The first authentic account of the pop. of Ireland is given by Sir William Petty, in his tract entitled the 'Political Anatomy of Ireland.' Sir William was employed by government to superintend the survey and valuation of the forfeited estates, instituted during the protectorate; and so well did he execute his task, that his survey continued, for the space of near two centuries, to be the standard of reference in the courts of law as to all points of property. He had altogether, the best means of obtaining accurate information with respect to the numbers and condition of the people; and, as the results are exceedingly curious, it may be best to give them in his own words.

'The number of people now in Ireland (1762) is about 1,100,000; viz. 300,000 English, Scotch, and Welsh Protestants, and 800,000 Papists; whereof 1-4th are children unfit for labour, and 75,000 of the remainder are, by reason of their quality and estates, above the necessity of corporal labour; so as there remains 750,000 labouring men and women, 500,000 whereof do perform the present work of the nation.

Digitized by Google

'The said 1,100,000 people do live in about 200,000 families or houses, whereof there are about 16,000 which have more than one chimney in each, and about 24,000 which have but one; all the other houses, being 160,000, are wretched nasty cabins, without chimney, window, or door-shut, even worse than those of the savage Americans.' (Polit. Anat. of Ireland, pp. 114, 118, ed. 1719.) In 1805, Mr. Newenham estimated the pop. at 5,395,456. An incomplete census was taken in 1821, from which the pop. was computed at 5,937,856. At length a complete census was taken in 1821, when Ireland was found to contain a pop. of 6,801,827. According to the census, taken in 1841, the pop. amounted to 8,175,124, viz. Leinster, 1,973,731; Munster, 2,396,161; Ulster, 2,386,373; Connaught, 1,418,859. Finally, the census of April 7, 1861, gave the following result :—

Provinces, Counties, Cities, and Towns	Number of Inhabitants in 1861		
	Males	Females	Persons
PROVINCE OF LEINSTER.			
Carlow County	28,185	29,047	57,232
Drogheda Town	6,840	7,890	14,730
Dublin City, Municipal	114,294	135,439	249,733
,, ,, Suburbs	19,132	27,099	46,231
,, County	50,383	55,675	106,058
Kildare ,,	43,200	41,730	84,930
Kilkenny City	6,395	7,686	14,081
,, County	53,414	56,062	109,476
King's ,,	44,042	44,449	88,491
Longford ,,	35,893	35,699	71,592
Louth ,,	36,847	38,293	75,140
Meath ,,	55,876	54,733	110,609
Queen's ,,	45,154	45,596	90,750
Westmeath ,,	46,170	44,686	90,856
Wexford ,,	68,774	74,820	143,594
Wicklow ,,	43,774	42,319	86,093
Total of Leinster	698,373	741,223	1,439,596
PROVINCE OF MUNSTER.			
Clare County	82,562	83,713	166,275
Cork City	36,017	42,875	78,892
,, County, E.R.,	137,260	143,183	280,443
,, ,, W.R.	88,930	89,231	178,161
Kerry ,,	100,923	101,965	201,988
Limerick City	19,738	24,888	44,626
,, County	84,417	86,566	170,983
Tipperary ,, N.R.	53,136	55,330	108,466
,, ,, S.R.	67,737	71,293	139,030
Waterford City	10,701	12,519	23,220
,, County	53,592	57,524	111,116
Total of Munster	734,113	769,087	1,503,200
PROVINCE OF ULSTER.			
Antrim County	118,142	129,272	247,414
Armagh ,,	90,846	98,536	189,383
Belfast Town	54,164	65,078	119,242
Carrickfergus Co. and Town	4,200	5,198	9,398
Cavan County	77,473	76,499	153,972
Donegal ,,	115,545	121,314	236,859
Down ,,	140,868	158,998	299,866
Fermanagh ,,	51,638	53,734	105,372
Londonderry ,,	88,518	95,619	184,137
Monaghan ,,	61,834	64,506	126,340
Tyrone ,,	116,908	121,518	238,426
Total of Ulster	920,136	990,272	1,910,408
PROVINCE OF CONNAUGHT.			
Galway County	125,865	128,391	254,256
,, Town	7,897	8,889	16,786
Leitrim County	52,445	52,170	104,615
Mayo ,,	125,399	129,050	254,449
Roscommon ,,	78,836	77,318	156,154
Sligo ,,	61,897	63,182	125,079
Total of Connaught	452,339	459,000	911,339
Total of Ireland	2,804,961	2,959,582	5,764,543

A comparison of the census returns of 1841, 1851, and 1861, strikingly shows the decrease of population in the various provinces and counties :—

Provinces and Counties	1841	1851	1861
PROVINCE OF LEINSTER.			
Carlow County	86,228	68,078	57,232
Drogheda Town	16,261	16,847	14,730
Dublin City, Municipal	232,726	258,369	249,733
Do. do. Suburbs	140,047	146,778	46,231
Do. County			106,058
Kildare County	114,488	95,723	84,930
Kilkenny City	19,071	19,975	14,081
,, County	183,349	138,773	109,476
King's ,,	146,857	112,076	88,491
Longford ,,	115,491	82,348	71,592
Louth ,,	111,979	90,815	75,140
Meath ,,	183,828	140,748	110,609
Queen's ,,	153,930	111,664	90,750
Westmeath ,,	141,300	111,407	90,856
Wexford ,,	202,033	180,158	143,594
Wicklow ,,	126,143	98,979	86,093
Total of Leinster	1,973,731	1,672,738	1,439,596
PROVINCE OF MUNSTER.			
Clare County	286,394	212,440	166,275
Cork City	80,720	85,732	78,892
,, County, E.R.	773,398	351,815	280,443
,, ,, W.R.		211,761	178,161
Kerry ,,	293,880	238,254	201,988
Limerick City	48,391	53,448	44,626
,, County	281,638	208,684	170,983
Tipperary ,, N.R.	435,553	147,209	108,466
,, ,, S.R.		184,358	139,030
Waterford City	23,216	25,297	23,220
,, County	172,971	138,738	111,116
Total of Munster	2,396,161	1,857,736	1,503,200
PROVINCE OF ULSTER.			
Antrim County	276,188	251,383	247,414
Armagh ,,	232,393	196,084	189,382
Belfast Town	75,308	100,301	119,242
Carrickfergus County & Town	9,379	8,520	9,398
Cavan County	243,158	174,064	153,972
Donegal ,,	296,448	255,158	236,859
Down ,,	361,446	320,817	299,866
Fermanagh ,,	156,481	116,047	105,372
Londonderry ,,	222,174	192,022	184,137
Monaghan ,,	200,442	141,823	126,340
Tyrone ,,	312,956	255,661	238,426
Total of Ulster	2,386,373	2,011,880	1,910,408
PROVINCE OF CONNAUGHT.			
Galway County	422,923	297,897	254,256
,, Town	17,275	23,787	16,786
Leitrim County	155,297	111,897	104,615
Mayo ,,	388,887	274,499	254,449
Roscommon ,,	253,591	173,436	156,154
Sligo ,,	180,886	128,515	125,079
Total of Connaught	1,418,859	1,010,031	911,339
Total of Ireland	8,175,124	6,552,385	5,764,543

The causes which led to the diminution of the population between 1851 and 1861 were not of the twofold character to which the decrease was to be attributed between 1841 and 1851. In the latter decade it may be said to have been entirely owing to the great mortality and emigration which originated with the famine consequent upon the failure of the potato crop for several years, commencing with 1845. The diminution between 1851 and 1861 may be said to have been directly due to emigration, no fatal epidemic having prevailed during that period.

Digitized by Google

In 1861 there were 42·6 in every 100 families chiefly employed in agriculture—being a reduction in the proportion of 10 per cent. since 1851, and of 23·5 since 1841. In manufactures, trades, &c. there was also a reduction from 24·7 in 1851, and 23·9 in 1841 to 17·5 per cent. in 1861. In other pursuits the proportion increased from 10 per cent. in 1841 and 22·7 in 1851 to 39·9 in 1861. But these changes may be said to have arisen from the emigration of persons employed in agriculture or trade, who in the census of 1841 and 1851 were classed in these divisions: thus raising the proportion of families which remained in the country who were engaged in other pursuits.

The condition of the people is more satisfactorily exhibited in considering the means upon which they are dependent. Thus, in 1861, there were chiefly dependent on vested means and professions 8·9 per cent. of the families—an increase from 2·6 in 1841 and from 7 per cent. in 1851. Engaged in the direction of labour there were 45·1 per cent. in 1861, compared with 34·4 in 1851 and 31·8 in 1841. There were living by their own manual labour in 1861, 35·3 per cent. of families; whilst in 1851 the rate was 52, and in 1841 62·9 per cent. Those whose means of subsistence were not specified, and many of whom probably should be included with those having vested means, amounted to 10·7 per cent.; the proportion in 1841 having been only 2·7, and in 1851 6·6 per cent.

Of the entire population, 2,705,665, or 46·66 per cent., were returned in the family schedules of the census of 1861 as having some occupation or pursuit; and 3,093,302, or 53·34 per cent., had no specified occupations. This latter number included 1,770,714 persons (890,904 males and 879,810 females) under 15—the age at which employment might be expected to commence. Above that age those having no specified occupations amounted to 1,322,588, of whom 101,673 were males, and 1,220,915 females.

According to the census of 1861, there were 1,053,045 persons, or 18·16 per cent. of the entire population, engaged in occupations placed under the head of ministering to food; of these 945,615 were males, and 107,430 females. 490,492 persons, or 8·46 per cent. of the people, ranged under employments ministering to clothing, of whom 150,856 were males, and 339,636 females. Ministering to lodging, furniture, and machinery were 463,562 persons; to conveyance and travelling, 68,791; to banking and agency, 4,568; to literature and education, 40,853; to religion, 10,627; to charity and benevolence, 983; to health, 6,735; to justice and government, 55,085; to amusement, 2,840; to science and art, 757; and under unclassified occupations, which could not be properly placed under any of the above heads, were 507,327 persons.

The total number of Irish who left the United Kingdom between 1841 and 1851 was, by the reports of the emigration commissioners, 1,240,737; whilst the number who emigrated from Irish ports during the period from 1st April, 1851, to 7th April, 1861, according to the returns obtained by the registrar-general, was 1,208,350.

The following are the number of emigrants who left Ireland in each of the fourteen years between 1851 and 1864:—

Years	Emigrants
1851	179,507
1852	190,322
1853	173,148
1854	140,555
1855	91,914
1856	90,781
1857	95,081
1858	64,337
1859	80,599
1860	84,621
1861	17,485
1862	49,680
1863	116,391
1864	115,428

Had emigration and immigration been equal between 1851 and 1861, and the excess of births over deaths—or the natural increase of population—on an average, equal to that of England and Wales, the number of inhabitants, on the 7th April, 1861, would have been 7,241,758.

Rural Economy.—The bulk of the population depend for employment and subsistence on the soil. The competition for small patches of land is consequently very keen, and the rents greater than the occupiers can afford, though not greater than might be paid for them, were they consolidated into proper sized farms, and cultivated on an improved system. In Ireland, in fact, the possession of a piece of ground has long been a condition all but indispensable to existence; and we need not, therefore, wonder that the occupiers should cling with desperate tenacity to their small patches.

This has led in most parts to a sort of tacit but well-understood agreement among the cottiers, or small farmers, to support each other against intruders; and, in the greater part of Ireland, it is as necessary to the quiet possession of the land to secure what is called the tenant's right, or the good-will of the occupier, as it is to make a bargain with the landlord. Any tenant who should neglect this indispensable precaution would run a great risk of being disturbed in, or violently ousted from, his possession. Indeed, most of the disturbances by which Ireland has been so long agitated and disgraced have been of an agrarian character, or have been directly or indirectly connected with the occupancy of the land. It is not necessary to enter into any lengthened disquisitions as to the various circumstances which have led to that minute parcelling of the land that is the bane of Ireland. The greatest influence is no doubt to be ascribed to the habit of providing for the sons, and sometimes, also, the daughters of the occupiers of land, by giving them shares of their father's holdings.

A good deal of what is peculiar in the mode of occupying land in Ireland has grown out of the circumstances under which it was originally acquired by the ancestors of its present owners. About nine-tenths of the land was forfeited under Cromwell and William III.; and this vast amount of property was mostly either gratuitously bestowed upon, or was acquired at a very small sacrifice, by noblemen and gentlemen of fortune and influence in England. Such persons could not be expected to leave England to reside in Ireland; and, in point of fact, they very rarely visited their estates in the latter, but satisfied themselves with taking what rents they could get for them. There was no sympathy between them and their tenants: the religious and political principles of one party were opposed to those of the other. The landlords looked upon their tenants as a sort of unwilling bondsmen, who, if any favourable opportunity should present itself, would immediately shake off their dependence on them; and the tenants regarded the landlords as usurpers unjustly intruded on the estates of others, and as enemies to the religion and rights of the Irish people. Very few had any confidence in the stability of such a state of things; and it could not be expected that landlords should care much about the permanent interests of such estates, or

Digitized by Google

that they should lay out any considerable sum on their improvement. To build a farm-house or offices was an outlay which, for a lengthened period, no Irish landlord ever incurred; and even to this day the old habit maintains an ascendancy, and the great majority of landlords lay out little or nothing on buildings. In consequence of this practice, and of the general smallness of the holdings, and the poverty of the occupiers, the farm-buildings, if we may so call them, of Ireland are, as already stated, quite unworthy of the name; and, in most instances, are wretched in the extreme. Such a thing as a barn is hardly known among the smaller occupiers: and the corn is not unfrequently thrashed on the public roads, which serve as barn-floors.

The three principal crops grown in Ireland are oats, potatoes, and hay, which combined occupy about three-fourths of the entire area under tillage. The proportions of these three crops in 1851 and 1861 were as under:—

PROPORTION IN EVERY 100 ACRES UNDER CROPS.

Year	Oats, Acres	Potatoes, Acres	Hay, Acres	All other Crops, Acres
1851	37·4	14·8	21·3	26·5
1861	33·9	19·3	26·3	20·5

The following are the proportions of the crops comprised under the head of 'all other crops':—

Year	Wheat, Barley, Bere, Rye, Beans and Peas	Turnips and Mangold, Carrots, Parsnips, Cabbage, Vetches, and Rape	Flax
1851	15·5	8·6	2·4
1861	10·6	7·4	2·5

The acreage of the entire country, and the proportion under arable land, plantations, towns, water, and uncultivated districts, at the several census periods in 1841, 1851, and 1861, are given in the following table, showing the number of acres in each province under cultivation, or otherwise occupied in the year, 1841, 1851, and 1861; also the same reduced to proportions per cent.:—

	Division of Surface				
	Arable Land	Plantations	Towns	Water	Uncultivated
Leinster	Acres	Acres	Acres	Acres	Acres
1841	3,961,188	115,944	15,569	51,624	731,886
1851	4,037,717	101,776	18,712	52,009	665,997
1861	4,079,130	102,218	20,063	52,009	622,895
Munster					
1841	3,874,613	130,415	14,693	151,381	1,893,477
1851	4,310,452	103,665	14,238	151,381	1,484,843
1861	4,538,954	106,347	13,176	152,157	1,257,987
Ulster					
1841	3,407,539	79,783	8,790	214,956	1,764,370
1851	3,994,259	58,611	8,815	214,956	1,198,797
1861	4,057,563	59,661	12,183	210,234	1,139,743
Connaught					
1841	2,220,960	48,340	3,877	212,864	1,906,002
1851	2,460,153	40,854	3,825	212,864	1,674,347
1861	2,790,078	48,371	3,814	213,064	1,336,713
Total of Ireland					
1841	13,464,300	374,482	42,929	630,825	6,295,735
1851	14,802,581	304,906	45,590	631,210	5,023,984
1861	15,464,825	316,597	49,236	627,464	4,357,338

The foregoing table reduced to proportions per cent:—

	Acres	Acres'	Acres	Acres	Acres
Leinster					
1841	81·23	2·38	0·32	1·07	15·00
1851	82·80	2·09	0·38	1·07	13·66
1861	83·65	2·10	0·41	1·07	12·77
Munster					
1841	63·89	2·15	0·24	2·50	31·22
1851	71·08	1·71	0·23	2·50	24·48
1861	74·79	1·75	0·22	2·51	20·73
Ulster					
1841	62·23	1·46	0·16	3·93	32·22
1851	72·95	1·07	0·16	3·93	21·89
1861	74·05	1·09	0·22	3·84	20·80
Connaught					
1841	50·57	1·10	0·09	4·85	43·39
1851	56·01	0·93	0·09	4·85	38·12
1861	63·53	1·10	0·09	4·84	30·44
Total of Ireland					
1841	64·71	1·80	0·21	3·03	30·25
1851	71·14	1·47	0·22	3·03	24·14
1861	74·29	1·52	0·24	3·02	20·93

The chief alteration in the surface of the country was caused by the conversion of bog and waste into pasture, 3·3 acres in every 100 having been returned as uncultivated in 1851 which were profitable in 1861. The number of acres added to the grass lands in the period was 784,952.

The amount returned under bog and waste is not, as already stated, to be considered as altogether unprofitable, as the large areas of bog throughout the country afford fuel at a much cheaper rate than coals could at present be procured.

The census returns show that the number of small holdings in Ireland, above one and up to five acres, was reduced from 310,436 in 1841, to 85,469 in 1861, or 72·5 per cent. Holdings from five to fifteen acres decreased from 252,799 in 1841 to 183,931 in 1861, or 27·2 per cent. The farms above fifteen acres increased in number; those between fifteen and thirty acres, 79,342 in 1841 were 141,251 in 1861, an increase of 78 per cent.; and the holdings above thirty acres from 48,625 in 1841 to 157,833 in 1861, or 109·208 per cent. These changes were substantially made between the years 1841 and 1851; the changes in the next ten years have been comparatively trifling. This statement does not show the number of landholders in Ireland, but the number of distinct holdings, the enumerator having to account for the total acreage of every townland. There was another return made, for the first time, in the census of 1861.

The enumerators of the census of 1861 were instructed to obtain an account treating all farms held by one person as one holding, whether the lands adjoined or not. This reduced the return of the total number of holdings in 1861 from 610,045 to 553,664. It showed that 39,210 persons held land in Ireland not exceeding one acre; 75,141 held above one and not exceeding two acres; 164,006 from five to fifteen acres; 127,899 from fifteen to thirty; 65,896 from thirty to fifty; 49,654 from fifty to 100; 20,375 from 100 to 200; 9,046 from 200 to 500; and 2,437 held above 500 acres. The return being novel, is approximate rather than precisely accurate; the tendency of corrections would be to reduce the numbers, but it would not be to any great extent.

From the returns of the Registrar-General it appears that the total area of land under cultivation in Ireland in the year 1864 was 5,672,980 acres,

Digitized by Google

being an increase of 10,493 acres over the extent of tillage of 1863. The number of acres under wheat in 1864 was 279,863, being 19,552 over 1863; but there was a decrease in the acreage under oats amounting to 145,965 acres, the total number of acres grown being 1,869,918. The whole return of 1864 shows a total decrease in cereal crops to the extent of 122,437 acres. The returns of the green crops are:—Potatoes, 1,039,282 acres; turnips, 337,283 acres; mangold-wurzel and beetroot, 14,106 acres; cabbage, 31,756 acres; carrots, parsneps, and other green crops, 23,190 acres; vetches and rape, 29,918 acres; total, 1,475,535.

Owing to the humidity of the climate, the country is not well fitted for wheat and barley, which are at once more precarious and not of so good quality as in England; but it is admirably suited for the growth of oats, the culture of which has rapidly increased. Turnips are cultivated only in some of the best farmed districts, and, though extending, are not to be looked upon in the light of a general crop.

Concurrently with an increase of arable land between 1841 and 1861, there has been in the twenty years a large increase in the value of live stock in Ireland. In 1841, according to the returns obtained by the census commissioners, horses, mules, and asses, and cattle, sheep, pigs, and poultry, were valued at 21,105,808*l.* In the year 1861 the same description of stock, according to the returns of the registrar-general, were, at the like estimated rates of average value, worth 33,363,194*l.*, showing a rise in value of 12,257,386*l.* during that period; while, if the improved breeds and enlarged demand for live stock in 1861, compared with 1841, were to be taken into account, the value in 1861 would, no doubt, be still greater.

Ireland, on the whole, is much better adapted for grazing than for agriculture: and such, in this respect, is the excellence of the soil, that in most parts it never fails, however foul and exhausted when laid down to grass, speedily to clothe itself with a rich and luxuriant cover of herbage. The natural effect of this has been that of late years, under improved management—notably since the period of 1851–61—Ireland has chiefly become a grazing country.

Rent of Land and Value of Real Property.—In 1727, Mr. Brown computed the gross rental of Ireland, inclusive of quit-rents, tithes, &c., at 2,824,000*l.*; and, in 1778, Mr. Young estimated it at 6,000,000*l.* (Newenham's View of Ireland, p. 232.) Mr. Wakefield, from minutes collected in his tour, estimated the average rental of Ireland at 27*s.* the Irish acre, or at 16*s.* 6½*d.* the imperial acre (vol. i. p. 305); and, notwithstanding the imperfect data on which it was founded, this estimate, though, perhaps, in excess, probably came near the mark. However, the elaborate estimate framed by Mr. Griffith, and contained in his evidence given in the Second Report of the Lords' Committee on Tithe (1832), is more deserving of attention: it is principally based on official valuations, and is probably, therefore, a little under the mark. According to Mr. Griffith the total rent of Ireland in 1832 amounted to 12,715,478*l.*, which would give an average rent of 12*s.* 2*d.* per acre for the whole kingdom. But to get a correct notion of the rent, the area occupied by water, amounting to 630,825 acres, must be deducted, and this being done the average rent would have been 12*s.* 7*d.* an acre. According to the most recent estimate of the value of the land obtained under the valuation of the poor's rate, the average rent per acre, deducting water, is 13*s.* 7*d.*

The subjoined tabular statement shows the official return of the gross annual value of real property—including railways and canals—assessed to income-tax, in the various counties and parliamentary divisions of Ireland in each of the years (ending April 5), 1862 and 1857.

Counties or Parliamentary Divisions	Gross Annual Value of Real Property, assessed to Income Tax in the Year ending 5th April	
	1862	1857
	£	£
Antrim . .	556,601	526,751
Armagh . .	291,697	288,889
Carlow . .	154,907	137,989
Cavan . .	264,842	240,334
Clare . .	310,700	195,841
Cork . .	923,823	834,345
Donegal . .	298,688	263,011
Down . .	604,871	611,311
Dublin . .	531,192	478,372
Fermanagh . .	196,592	191,753
Galway . .	446,439	344,151
Kerry . .	258,752	244,279
Kildare . .	327,728	289,430
Kilkenny . .	324,956	310,807
King's County .	244,518	216,694
Leitrim . .	132,691	127,866
Limerick . .	422,698	405,158
Londonderry .	261,921	251,115
Longford . .	150,073	129,943
Louth . . .	193,935	168,009
Mayo . . .	314,085	216,820
Meath . . .	547,986	488,748
Monaghan . .	251,172	246,015
Queen's County .	250,583	231,172
Roscommon .	294,176	218,304
Sligo . . .	180,197	158,251
Tipperary . .	647,289	591,837
Tyrone . .	377,359	363,975
Waterford . .	251,928	234,265
Westmeath . .	309,409	253,013
Wexford . .	351,718	302,423
Wicklow . .	285,625	265,224
Total . .	10,957,351	9,826,095

Fisheries.—The seas round Ireland swarm with fish. Cod, ling, and hake are found in great abundance on the Nymph Bank to the S. of Waterford. Flat fish also abound in many parts. Large shoals of herrings visit the coast annually; and the bays and creeks furnish great quantities of the smaller and more delicate species, as pilchards, sprats, smelts, and sand-eels. The basking whale and sunfish are often seen off the western coast. But the fishery has never been either largely or successfully carried on by the Irish. In 1764 a system of bounties was established to encourage the trade, but without any material success. It was revised in 1819 by a commission, which also gave loans for the purchase of boats and tackle. With such encouragement the number of fishermen and boats increased considerably during the ten years the system was in operation. But though the fishing declined on the bounties being withdrawn, this decline was temporary only, and it has since considerably increased.

There are salmon and eel fisheries in most of the great rivers. The salmon fisheries in the Bann, near Coleraine; the Foyle, the Billick, near Ballyshannon; the Boyne, above Drogheda; and in various other parts are very productive. Irish salmon, packed in ice, is principally exported to Liverpool, Bristol, and London. There were employed in 1864, upon the coast of Ireland, 9,300 vessels, with 37,416 men and 3,530 boys. The return showed a considerable falling off as compared with 1863, but it was believed to be owing

Digitized by Google

mainly to an increased strictness in the revision of the registry, which previously included boats and men long after they had ceased to be employed.

Manufactures.—Ireland is not, and never has been a manufacturing country. Its unsettled state, and the general dependence of the population on land, have hitherto formed insuperable obstacles to the formation of great manufacturing establishments in most parts of the country; whilst the want of coal, capital, and skilled workmen, and the great ascendancy of England and Scotland in all departments of manufacture, will, there is reason to think, hinder Ireland from ever attaining to eminence in this department. And it is needless to add, that while manufactured goods can be produced cheaper in Britain than in Ireland, so long will the interests of the latter be best promoted by their importation.

The woollen manufacture was carried on to some extent in Ireland previously to the revolution of 1688, soon after which, in compliance with the interested solicitations of the English manufacturers, the export of Irish woollens to foreign parts was prohibited, and oppressive duties laid on their importation into England. The existing woollen manufacture of Ireland is carried on upon a small scale. At Dublin, and other parts in the vicinity, some cloth of a better description is made; and other branches are carried on to some extent in Kilkenny and other places, more especially at Moun-melick and Abbeyleix, in Queen's Co., and a few other places.

To compensate for the bad treatment of the woollen, the linen manufacture of Ireland was long the object of especial patronage. It was fostered and promoted by a number of statutes, and placed under the superintendence of a board, with an annual grant of public money for distribution in premiums and bounties. The board, however, has been discontinued for many years, and the grants withdrawn. The manufacture is chiefly confined to Ulster. It was at one time very generally diffused over the country; the yarn being spun by the cottier's family, and woven by the cottier himself. But since the introduction of machinery for the spinning of yarn, and of power-looms, the old system has been to a considerable extent abandoned, and the yarn is now principally spun by machinery.

A good deal of cloth is also made by power looms; but the greater part continues to be woven in the houses of the cottiers, who are supplied with yarn by the agents of the manufacturers. In fact, but for this change of system, the manufacture would have been wholly annihilated; as the manufacturers under the old domestic system could not have withstood the competition of Dundee, Leeds, and other towns in England and Scotland.

The exports of flax from Ireland for the years 1862, 1863, and 1864 show a remarkable advance. For the first eleven months of 1862 the total export of linen yarns and linen manufactures was, in value, 6,292,000*l.* For the same months in 1863 it was 8,084,000*l.*; and in 1864 it rose to 10,327,000*l.* In the year 1864, the produce per acre of flax in Ireland was five cwt., which was 10 per cent. above the average of the seven years ending with 1862.

From 1864 to 1865, the area of flax culture in Ireland slightly decreased. It appears from the returns of the registrar-general, that in Ulster in 1864 there were 278,143 acres under flax, and in 1865, 233,289—decrease 44,854; in Leinster, in 1864, 7,388 acres, and in 1865, 5,862 acres—decrease, 1,526 acres; in Munster, in 1864, 7,580 acres, and in 1865, 4,980 acres—decrease, 2,600 acres; and in Connaught, in 1864, 8,582 acres, and in 1865, 7,421 acres—decrease 1,161 acres. The total number of acres in 1864 was 301,693, and in 1865, 251,552 — decrease on the whole, 50,141 acres. The quantity grown in 1865 was still, however, by a very large figure, greater than that of 1863, which was greater by about 60,000 acres than any of the previous 12 years.

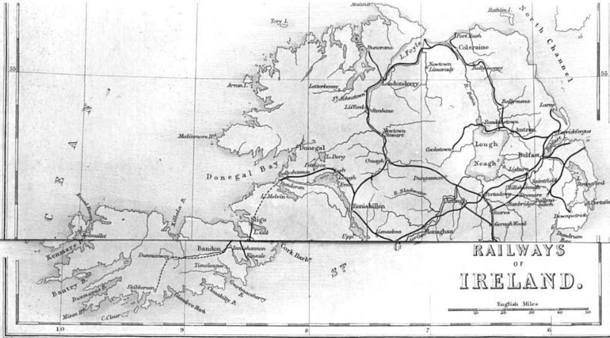
The silk trade was introduced by French emigrants shortly after the Revolution. Its chief seat was in Dublin; but since the repeal of the protecting duties it has declined, so as to be now nearly extinct, with the exception of tabbinet or Irish poplin, a mixed fabric of silk and worsted, for which there is a considerable demand. The first importation of cotton wool into Ireland, of which there is any authentic notice, took place in 1771. The manufacture was carried on with some little success in several parts during the continuance of the protecting duties. On their withdrawal it declined for a while; but it has since revived.

Of the number of people employed in the chief branches of manufacture, a clear account is given in the census returns of 1861, which enter minutely into the subject. It appears from these returns that the number of workers, male and female, in the two manufactures of cotton and flax, and of mixed materials, was as follows at the date of the census:—

	Males	Females
WORKERS IN COTTON AND FLAX.		
Flax Yarn Manufacturers	11	1
Linen Manufacturers	372	17
Linen Thread Manufacturer	1	..
Flax Merchants and Dealers	291	26
Flax Dressers	3,289	973
Flax Twisters and Hacklers	731	61
Flax Spinners	279	6,658
Thread Makers	182	220
Tape Weavers	2	..
Linen and Damask Weavers	33,074	27,552
Linen Lappers	618	114
Lace Manufacturers, Weavers, and Workers	61	1,404
Cotton Manufacturers	11	5
Cotton Merchants	7	15
Cotton and Muslin Weavers	4,957	3,161
Cotton Spinners	223	571
Wick Maker	..	1
Lint Makers	11	5
Flock Makers	..	2
Quilt Makers	..	447
Corduroy Weavers	3	1
Corduroy Cutters	2	2
Gingham Weaver	1	..
Sewed Muslin Manufacturers	82	8
Sewed Muslin Agents	211	94
Muslin and Calico Printers	216	47
Muslin Lappers	5	12
Sewed Muslin & Tambour Workers	133	40,978
WORKERS IN MIXED MATERIALS.		
Weavers (unspecified)	16,767	12,377
Drapers (unspecified)	4,879	1,019
Linen Drapers	221	66
Linen Merchants	281	11
Girth Web Makers	5	..
Fringe and Tassel Makers	8	39
Fringe Manufacturers	1	13
Embroiderers	11	3,802
Bleachers	2,026	273
Spinners (unspecified)	519	37,428

The comparatively limited extent of Irish manufacturing industry is shown in the subjoined table, which gives the returns of the total number of factories for spinning and weaving cotton, wool, flax, hemp, jute, and silk, in the United Kingdom, in 1861, number of spindles, and the number of persons employed therein.

Digitized by Google



London: Longman & Co.

Digitized by Google

Factories	No. of Factories	No. of Spindles	Total Numbers employed		
			Males	Females	Males and Females
COTTON					
England and Wales	2,715	28,352,125	173,704	233,894	407,598
Scotland . .	163	1,915,398	8,028	33,209	41,237
Ireland . . .	9	119,944	824	1,910	2,734
Total . .	2,887	30,387,467	182,556	269,013	451,569
WOOLLEN					
England & W.	1,456	1,846,850	44,098	32,211	76,309
Scotland . .	184	317,185	5,211	4,601	9,812
Ireland . . .	39	18,574	445	417	862
Total . .	1,679	2,182,609	49,754	37,229	86,983
WORSTED					
England & W.	512	1,245,526	30,392	52,580	82,972
Scotland . .	17	38,946	1,073	1,843	2,916
Ireland . . .	3	4,700	36	139	175
Total . .	532	1,289,172	31,501	54,562	86,063
FLAX					
England & W.	136	344,308	5,920	14,385	20,305
Scotland . .	163	279,385	8,743	24,856	33,599
Ireland . . .	100	592,981	9,953	23,572	33,525
Total . .	399	1,216,674	24,616	62,813	87,429
HEMP					
England & W.	3	264	47	15	62
Scotland . .	2	2,316	58	487	545
Ireland . . .	..	..	..	..	..
Total . .	5	2,580	105	502	607
JUTE					
England & W.	4	620	23	84	107
Scotland . .	27	30,538	1,830	3,588	5,418
Ireland . . .	5	1,824	196	246	442
Total . .	36	32,982	2,049	3,918	5,967
SILK					
England & W.	761	1,305,910	15,301	35,890	51,191
Scotland . .	8	31,452	193	911	1,104
Ireland . . .	2	1,182	36	98	134
Total . .	771	1,338,544	15,530	36,899	52,429
HOSIERY					
England & W.	65	543	1,955	2,108	4,063
Scotland . .	4	173	207	217	424
Ireland . . .	..	..	..	..	..
Total . .	69	716	2,162	2,325	4,487
England & W.	5,652	33,095,603	271,440	371,167	642,607
Scotland . .	568	2,615,220	25,343	69,712	95,055
Ireland . . .	158	739,205	11,490	26,382	37,872
Total, U. K.	6,378	36,450,028	308,273	467,261	775,534

Commerce and Shipping.—The total value of the exports from Irish ports to foreign countries was as follows in each of the four years 1860 to 1863 :—

Ports	1860	1861	1862	1863
	£	£	£	£
Belfast . .	10,283	27,094	4,118	12,041
Cork . .	136,698	131,840	132,130	108,102
Dublin . .	22,192	28,138	48,777	38,196
Dundalk . .	—	—	669	—
Galway . .	77,175	4,658	393	7,587
Limerick . .	3,290	4,892	2,961	10,054
Londonderry .	22,362	6,330	4,593	6,448
Newry . .	—	—	—	—
Ross . .	64	—	—	223
Skibbereen .	—	—	—	363
Sligo . .	—	—	1,530	—
Tralee . .	2,005	350	2,000	—
Waterford .	3,843	8,977	5,632	433
Wexford . .	150	—	200	1,856
Total of Ireland	278,062	212,279	203,003	185,303

The number and tonnage of British (including Irish) and foreign vessels which cleared at Irish ports in the year 1863, is given in the subjoined table :—

Ports	British		Foreign	
	Vessels	Tons	Vessels	Tons
Belfast . .	50	19,508	55	16,771
Coleraine . .	—	—	1	304
Cork . .	59	18,022	32	10,459
Drogheda . .	1	140	—	—
Dublin . .	99	34,182	97	35,502
Dundalk . .	3	732	3	648
Galway . .	11	3,943	11	3,837
Limerick . .	26	11,454	21	7,329
Londonderry .	26	16,492	11	5,654
Newry . .	7	4,854	4	1,553
Ross . .	4	1,562	2	627
Skibbereen .	1	438	3	924
Sligo . .	16	4,240	6	1,722
Strangford .	1	243	2	578
Tralee . .	2	1,117	4	1,642
Waterford .	12	4,149	18	7,157
Westport . .	3	796	—	—
Wexford . .	6	1,482	5	205
Total of Ireland	327	123,354	275	94,912

Canals.—The Grand Canal, commenced in 1765, is carried from Dublin to Robertstown, 25 m. W., whence proceed two branches, that to the right to the Shannon harbour, on the Shannon, near Banagher, and thence on the W. of the river to Ballinasloe, 94 m. from Dublin, with a branch of 8½ m. to Kilbeggan; that to the left to Athy, 55 m. from Dublin, with a branch of 11 m. from Monastereven to Portarlington and Mountmellick. The summit level is 200 ft. above the sea. The Barrow is navigable from Athy for small craft, to the Scars, 43 m., thence for larger vessels by Ross to Waterford, 30 m.

The Royal Canal, commenced in 1789, extends from Dublin to Tarmonbarry on the Shannon, 92 m., with a branch of 5 m. from Killashee to Longford. Its greatest height above sea level is 307 ft. The Shannon has been rendered navigable from Limerick almost to its source, and is traversed by steam-boats both for passengers and goods. The Boyne navigation from Drogheda to Navan, and the Lagan from Belfast to Lough Neagh, are partly river and partly still water. The Ulster Canal connects Loughs Neagh and Erne. The Suir Navigation Company was incorporated in the year 1837, for making a ship canal to Carrick-on-Suir.

Railways.—Numerous railways, some of which promise to be of great advantage, have been opened in Ireland; others are in course of being constructed, while many more have been projected. Among the leading lines may be specified the Great South Western, extending from Dublin to Cork and Limerick, with branches to Killarney and other places; the South Eastern to Waterford and Wexford; the Great Western connecting Dublin with Mullingar, Athlone, and Galway; the Northern line from Dublin to Belfast, and the Second Northern line, running almost parallel to it, to Londonderry, by way of Enniskillen. Dublin is the centre of five lines of railway, Cork of four, and Belfast of three. Except the north western districts of Ireland, the country is intersected throughout by a well-planned network of railways. The subjoined tabular statement shows the progress of the Irish railway system from 1854 to 1863, giving the length of lines, the total paid-up capital, the total number of passengers, and the traffic receipts in each of the ten years :—

Digitized by Google

Years	Length of Lines open at the End of each Year	Total Capital Paid up (Shares and Loans) at the End of each Year	Total Number of Passengers Conveyed	Total of Traffic Receipts
	Miles	£		£
1854	897	14,351,122	6,911,170	874,477
1855	987	15,208,295	7,212,286	999,832
1856	1,057	15,965,692	7,881,453	1,117,965
1857	1,071	16,880,570	8,416,579	1,145,384
1858	1,188	17,822,864	8,447,774	1,175,720
1859	1,265	19,133,305	9,445,233	1,296,064
1860	1,364	20,599,775	9,991,118	1,368,447
1861	1,423	21,894,622	10,686,735	1,447,993
1862	1,598	23,324,707	10,436,873	1,446,092
1863	1,741	24,741,752	11,471,054	1,518,654

Revenue.—The revenue of Ireland is raised from the same sources as in England. But, owing to the depressed condition of the great bulk of the Irish people, and their inability to consume taxed articles, the revenue of Ireland falls far short of that of Great Britain. While the proportion of revenue per head of population amounted, in Great Britain, to 3*l.* 5*s.* 11*d.* in 1800, to 4*l.* 14*s.* in 1817, to 3*l.* 19*s.* 9*d.* in 1822, to 2*l.* 11*s.* 9*d.* in 1842, to 2*l.* 13*s.* 1*d.* in 1862, and to 2*l.* 12*s.* 7*d.* in 1863, it was as follows at the same dates in Ireland:—

Years ended	Estimated Population	Gross Receipts of Ordinary Revenue within the Year	Proportion of Revenue per Head of the Population		
		£	£	*s.*	*d.*
January 5, 1800	4,742,431	3,334,912	0	14	1
,, 1817	6,172,850	5,456,999	0	17	8
,, 1822	6,801,827	5,039,719	0	14	10
,, 1842	8,175,124	4,100,493	0	10	0
March 31, 1862	5,789,731	6,756,180	1	3	4
,, 1863	5,781,626	6,500,388	1	2	6

Exclusive of the above, or of the public revenue, a considerable sum is annually raised by grand jury presentments, that is, by assessments on the cos. made by the grand juries, for constructing and keeping up roads, prisons and bridewells, police and police establishments, and for charitable purposes. Subjoined is an account of the sums raised by presentments for various services made by the grand juries in Ireland, in each of the years 1861 and 1862.

	1861	1862
	£	£
New Roads, Bridges, Pipes, Gullets, Quay Walls, or cutting down Hills or filling up Hollows or Ditches	88,722	84,024
Repairs of Roads, Bridges, Pipes, Gullets, or Walls	505,483	505,461
Court or Sessions Houses, Erection or Repairs	6,109	6,652
Gaols, Bridewells, Houses of Correction, building or repairing	5,630	4,314
All other Prisons and Bridewell Expenses, including Salaries	74,468	83,366
Police and Police Establishments, and Payments to Witnesses	14,469	16,557
Salaries of County Officers not included in the foregoing	103,641	103,382
Public Charities	78,690	88,852
Repayment of Advances to Government	107,242	107,398
Miscellaneous	84,796	88,823
Gross Amount of Presentments	1,069,250	1,088,829
Amount of Re-presentments	14,351	18,885
Net Amount of Presentments	1,054,899	1,069,944

The above sums are small, compared with what is assessed for similar purposes in England.

Constitution and Administration of Justice.—The constitution of Ireland is modelled on that of England; but, for a lengthened period, the native Irish, comprising the great bulk of the population, were effectually excluded from all participation in its benefits, and were in fact reduced to a state of *helotism*. This conduct, it is needless to add, was little less injurious to the conquerors than to the conquered. 'As the English would neither in peace govern the Irish by the law, nor could in war root them out by the sword, they needs became pricks in their eyes and thorns in their sides.' But nations are slow and reluctant learners; and that selfish, short-sighted policy, whose effects were thus forcibly exposed by Sir John Davies (Discoverie, p. 120, ed. 1747) in the reign of James I., flourished in its full vigour down almost to our own times. The granting of the elective franchise to the Catholics, so late as 1792, was the first great step in the progress to a better system, which was happily consummated by the repeal of the last remnant of the penal code in 1829. The odious distinctions by which society was formerly divided have no longer any legal or statutory foundations. Adherence to the religion of their ancestors has ceased to entail upon the Catholics a denial of their political franchises; and all classes now participate equally in the rights and privileges granted by the constitution.

The legislature consisted, previously to the Union, of a chief governor, under the name of lord lieutenant, with power to appoint a deputy during absence, a house of lords, and a house of commons. Under Henry VII., the prostration of the Irish parliament was effected, by transferring the right to hold parliaments, which had been vested in the lord lieutenant, and to originate bills, to the king and the English privy council. The first parliament, in which members were returned from all parts of Ireland, sat in the beginning of the reign of James I. The number of members varied at different times, but was ultimately fixed at 300, *two* for each co., *two* for Trinity College, and the remainder for cities and bors., the representatives for the latter being, in most instances, nominated by their proprietor or patron. Previously to 1768, the members held their seats for life, so that they could hardly be considered as representatives even of the Protestant part of the nation, and had but little sympathy with popular feelings. At this epoch, however, parliaments were made octennial.

Since the Union, Ireland has been represented in the imperial parliament by twenty-eight temporal peers, elected for life by the whole body of Irish peers; four bishops, who sit according to annual rotation of sees; and from the Union till the passing of the Reform Act, it was represented in the H. of C. by 100 members, two for each co., two each for the cities of Dublin and Cork, one for Trinity College, and one each for the 31 bors. of Armagh, Athlone, Bandon, Belfast, Carlow, Carrickfergus, Cashel, Clonmel, Coleraine, Downpatrick, Drogheda, Dundalk, Dungannon, Dungarvan, Ennis, Enniskillen, Galway, Kilkenny, Kinsale, Limerick, Lisburn, Londonderry, Mallow, New Ross, Newry, Portarlington, Sligo, Tralee, Waterford, Wexford, and Youghal. The Reform Act gave Ireland five additional members, which were assigned to Trinity College, Belfast, Galway, Limerick, and Waterford, which consequently have now two members each. It also vested the electoral franchise in cos. in the same classes as in England, with the substitution of 20*l.* for 50*l.*, and 14 for 20 years, and in cities and bors. in free-

Digitized by Google

men resident within 7 m., and 10*l.* freeholders. But these qualifications having been found to be too high, were reduced, in 1850, by the 13 & 14 Vict. cap. 69, which has given the franchise in counties to the occupiers of land rated for the poor-rate at the nett value of 12*l.* a year, and to the possessors of estates in fee or for life rated at 5*l.*: it has, also, given the franchise in towns to all parties occupying lands or premises rated at 8*l.* a year. The electoral boundaries of the bors. are fixed by statute. The executive government is vested in the lord lieutenant, or, in his absence, in the lords justices, generally the primate, lord chancellor, and commander of the forces, and a privy council nominated by the crown, and consisting chiefly of the high judicial and ministerial functionaries. The lord lieutenant is assisted by a chief secretary, a member of the House of Commons; and who, being in effect secretary for Ireland, is especially responsible for its government. The salary of the lord lieutenant is 20,000*l.* year, with a liberal allowances both for residence and household.

The judicial establishment is vested, as in Great Britain, in the lord chancellor, removable at pleasure, assisted by the masters of the rolls, and in twelve judges, four for each of the courts of queen's bench, common pleas, and exchequer. Two of the law judges go through each of the six circuits into which the country is distributed, twice a year, to decide criminal and civil cases. The judges of the courts of prerogative and admiralty are generally practising barristers. A barrister also presides along with the co. magistrates at the courts of quarter sessions. Petty sessions, at which at least two magistrates must be present, are held weekly, or once a fortnight, in every district.

Each corporate town has a judge or recorder, and local magistrates, elected by the corporation; and every manor has its courts under a seneschal or bailiff nominated by the proprietor. The lord chancellor has the power of appointing and removing the co. magistrates, for whose conduct he is responsible. An act passed in 1840 (3 & 4 Vict. cap. 108) for remodelling the municipal corporations in Irish towns. It gives the right of voting at municipal elections to all persons resident in boroughs, or within 7 m. of their boundaries, occupying houses, shops, or other premises within the same of the annual value of 10*l.*

The conservation of the peace is committed, in the cos., to a lord lieutenant, aided by an indefinite number of deputy lord lieutenants, all nominated by the crown and by the high sheriff, selected, as in England, from lists prepared by the judges of assize. Ireland has a well-organised constabulary force, which consisted, according to the census returns of 1861, of 13,864 officers and men. The actual number of soldiers in Ireland, at the same period, was returned at 26,276, exclusive of militiamen, to the number of 1,045. The military department is under the control of the commander of the forces. He has under him 5 general officers, who respectively command one of the 5 military districts into which the island is divided. The ordnance, which is a branch of that of Great Britain, has its chief station at the Pigeon House Fort: attached to it is the staff of the trigonometrical survey of Ireland. There is at Kilmainham a hospital for decayed and disabled soldiers, similar to that of Chelsea.

Crime and Criminals.—The subjoined table gives the total number of persons, of each sex, committed to prison in Ireland, for various offences, and the number convicted and not convicted, in the year 1862:—

	Males	Females	Total
COMMITTALS FOR EACH CLASS OF OFFENCES.			
Felony	1,519	817	2,336
Petty Larceny	1,484	1,256	2,740
Misdemeanants	7,855	5,342	13,197
Under Revenue Laws	160	38	198
,, Poor Law Act	334	260	594
By Courts-martial, and Deserters	410	—	410
Under Vagrant Act	627	699	1,326
Drunkards	3,080	3,788	6,868
Lunatics, dangerous and criminal	412	258	670
For further Examination or Trial	2,690	1,130	3,820
Total Committals	18,571	13,588	32,159
CONVICTED AT ASSIZES AND QUARTER SESSIONS.			
Felons	1,108	555	1,663
Misdemeanants	1,107	198	1,305
Criminal Lunatics	13	4	17
Total	2,228	757	2,985
SUMMARY CONVICTIONS.			
Offenders under Larceny Act	1,484	1,256	2,740
Misdemeanants	6,445	5,047	11,492
Dangerous Lunatics	399	254	653
Under Revenue Laws	160	38	198
,, Poor Law Act	334	260	594
Courts-martial	120	—	120
Deserters	290	—	290
Under Vagrant Act	627	699	1,326
Drunkards	3,080	3,788	6,868
Total	12,939	11,342	24,281
NOT CONVICTED.			
Felons acquitted	246	161	407
,, no Bill or Prosecution found	165	101	266
Misdemeanants acquitted	161	51	212
,, no Bill or Prosecution found	142	46	188
For further Examination	2,359	991	3,350
For Trial	331	139	470
Total	3,404	1,489	4,893

Religious Establishments.—The ecclesiastical arrangements that prevail in Ireland are at once anomalous and irrational. The Reformation never made any considerable progress in the country, the new doctrines being only espoused by the English settlers within the *pale*. But after Protestantism had been adopted by the bulk of the English people, and had been made the established religion on this side the water, it was determined to establish it as the state religion in Ireland. In pursuance of this resolution, the Catholic clergy were ejected from their livings, which were bestowed upon divines attached to the doctrines of the church of England. This change did not, however, produce any corresponding change in the religious feelings of the people, who seemed, indeed, to become the more attached to their ancient faith, according as their clergy were treated with harshness and injustice. In every other country, the established religion, if there be one, is that of the great majority of the people; but in Ireland the established religion is, and long has been, that of a small minority—and that minority, be it observed, consists principally of the wealthy and best educated classes, who could, without difficulty, supply themselves with religious instruction. Such an arrangement is inconsistent with and subversive of every principle of sound policy and common

Digitized by Google

sense. The grand object of an establishment, it is needless to say, should be the provision of religious instruction and consolation for the great bulk of the community, and especially for those who are too poor to be able to provide it for themselves. But in Ireland the reverse of all this obtains. The established religion is alien to and repudiated by nine-tenths of the pop., who regard it as erroneous in principle, and as a usurpation upon the rights and property of their clergymen. These feelings are natural; and it is nugatory to suppose that they should be got rid of, so long as the existing arrangements are maintained. A Catholic establishment in England would not, in fact, be more irrational and absurd than a Protestant establishment in Ireland; and, so long as the latter is permitted exclusively to enjoy the revenues appropriated by the state for the support of religion, so long will it be an object of disgust and hostility to the Catholic people and clergy, that is, to the great majority of the nation, and be productive of the most implacable animosities.

Previously to 1834, when the Church Temporalities Act, the 3 & 4 Will. 4, c. 37, was passed, the country was divided into 4 archbishoprics, corresponding nearly with its four civil provinces, and these were farther subdivided into 29 bishoprics, held by 18 bishops. But this hierarchy, obviously disproportioned to the wants of the country, was restricted within more moderate dimensions by the act referred to above. It reduced the archbishoprics of Cashel and Tuam to bishoprics; and divided the island into the northern and southern provinces, the archbishop of Armagh being the head of the one, and the archbishop of Dublin of the other. It also reduced the number of bishops to 10; and effected various changes in the revenues of the different sees, to take effect on the demise of the different incumbents by whom they were then occupied. The revenues arising from the cancelled bishoprics and other sources were vested in commissioners, to be applied to the building and repair of churches, and other ecclesiastical purposes.

Under the old arrangement, the archbishoprics and bishoprics, with their revenues, were as follows:—

Ulster.	
Armagh	£17,670
Meath and Clonmacnoise	5,220
Clogher	10,371
Down and Connor	5,896
Derry	14,193
Raphoe	5,787
Kilmore	7,478
Dromore	4,813
Leinster.	
Dublin and Glandelagh	£9,321
Kildare	6,452
Ossory	3,859
Ferns and Leighlin	6,550
Munster.	
Cashel and Emly	£7,354
Limerick, Ardfert, and Aghadoe	5,369
Waterford and Lismore	4,323
Cork and Ross	4,346
Cloyne	5,009
Killaloe and Kilfenora	4,041
Connaught.	
Tuam and Ardagh	£8,206
Elphin	7,034
Clonfert and Kilmacduagh	3,621
Killala and Achonry	4,082
Total Income	£150,635

The revenues increased greatly in course of time, as will be seen from the subjoined parliamentary return, issued in the session of 1863, which gives the revenues of the various dioceses in 1861, and the number of members of the Established Church in 1834 and 1864:—

Dioceses	Number of Members of the Established Church in		Revenues of the Established Church in each Diocese in
	1834	1861	1861
			£
Armagh and Clogher	207,371	150,386	82,930
Dublin and Kildare	120,506	112,766	55,103
Meath	25,626	16,321	34,828
Derry and Raphoe	83,857	65,603	56,153
Down, Connor, and Dromore	136,650	152,722	44,785
Kilmore, Elphin, and Ardagh	81,046	53,165	47,410
Tuam, Killala, and Achonry	22,765	17,156	27,539
Ossory, Ferns, and Leighlin	57,424	35,663	62,248
Cashel, Emily, Waterford, and Lismore	19,307	13,853	43,093
Cork, Cloyne, and Ross	55,156	43,228	65,423
Killaloe, Kilfenora, Clonfert, and Kilmacduagh	24,801	15,906	28,789
Limerick, Ardfert, and Aghado	18,651	15,103	32,117
Total	853,160	691,872	580,418

Another parliamentary return—ordered by the House of Commons, on the 6th May, 1863—shows the number of Roman Catholics in Ireland in the years 1834 and 1861; the number of members of the Established Church in Ireland in the years 1834 and 1861; and the proportion of Roman Catholics to members of the Established Church in 1834 and in 1861. It appears from this return that the number of Roman Catholics in Ireland was—

In 1834	6,436,060
In 1861	4,505,265

The number of members in the Established Church of Ireland was—

In 1834	853,160
In 1861	691,872

Consequently, the proportion of Roman Catholics to members of the Established Church was—

In 1834, 100 Roman Catholics to 13·25 members of the Established Church.
In 1861, 100 Roman Catholics to 15·35 members of the Established Church.

Exclusive of deans, prebendaries, and other dignitaries, Ireland is divided into about 2,400 parishes, and has about 1,400 beneficed clergymen. The incomes of the prelates and other dignitaries are principally derived from the rent of lands let on lease, or rather on leases renewable by fine. The other clergy are partly provided for by glebe lands, but principally by tithes, and in towns by an assessment called minister's money.

In addition to the unpopularity attaching to the church of England in Ireland, from its being the church of a minority, the fact of its deriving the largest portion of its income from tithes, tended materially to increase the odium under which it has long laboured. Tithe is everywhere a most vexatious and impolitic tax, but in Ireland it has been peculiarly noxious; for there the land being mostly split into small portions occupied by poor Catholic cottiers, the payment of tithes to Protestant clergymen is not only felt to be a most oppressive burden, but it is, at the same time,

Digitized by Google

looked upon as a sacrifice imposed for the promotion and advantage of heresy and error. It has also been very unfairly assessed. By a resolution of the Irish H. of C. in 1735, grass lands obtained an exemption from tithe; so that while a tenth part of the produce of a potato garden or slip of land, on which, perhaps, a numerous family was dependent, went to the establishment, the herds of the opulent grazier contributed nothing to its support. For a lengthened period, the payment of tithes in Ireland was made with extreme reluctance, and their collection has, in innumerable instances, been productive of outrage and bloodshed. At last, it became next to impossible, in many parts of the kingdom, to derive any revenue from this source; and in consequence it was attempted to substitute compositions or fixed payments for tithes in the room of tithes themselves. But, though productive of some advantage, this measure was comparatively useless, from its leaving the composition to be paid by the occupier and not by the landlord. To obviate this defect, an act was passed in 1838 (1 and 2 Victoria, cap. 109) abolishing compositions for tithes, and substituting in their stead a fixed payment of *three-fourths* of their amount (401,114*l.*) to be made by the landlords or others having a perpetual interest in the land. This act, by relieving the tithe-collector from the necessity of coming into contact with the great bulk of the occupiers, obviated a prolific source of predial disturbance. Still, however, it cannot be supposed that either this or any other device should ever reconcile the Irish people to the appropriation of a large revenue to the exclusive use of the church of a small minority of their number. The effect of this preposterous arrangement is to insult and alienate the bulk of the population, who would be more or less than men if it ceased to encounter their rooted hostility.

The R. Catholic church is governed nearly in the same manner as the Established church was previously to the recent changes. There are four archbishops, the same in name and provincial rank as those of the Protestant church, and 23 bishops. Eight of the bishops—Ardagh, Clogher, Derry, Down and Connor, Dromore, Kilmore, Meath, and Raphoe—are suffragan to Armagh. Dublin has but three suffragans—Kildare and Leghlin united, Ferns, and Ossory. Six are suffragen to Cashel, namely Ardfert and Aghadoe (usually called the bishop of Kerry, Cloyne, and Ross), Cork, Killaloe, Limerick, Waterford, and Lismore. Tuam has four suffragans—Achonry, Clonfert, Killala, and Galway. The bishop of the united dioceses of Kilmacduagh and Kilfenora is alternately suffragan to the archbishops of Tuam and Cashel. The wardenship of Galway, formerly an exempt jurisdiction, subject only to the triennial visitation of the archbishop of Tuam, has been lately erected into a bishopric, under its former archiepiscopal jurisdiction. On the death of a bishop, the clergy of the diocese elect a vicar-capitular, who exercises spiritual jurisdiction during the vacancy. They also nominate one of their own body, or sometimes a stranger, as successor to the vacancy, in whose favour they postulate or petition the pope. The bishops of the province also present the names of two or three eligible persons to the pope. The new bishop is generally chosen from among this latter number: but the appointment virtually rests with the cardinals, who constitute the congregation *de propagandâ fide*. Their nomination is submitted to the pope, by whom it is usually confirmed. In cases of old age or infirmity, the bishop nominates a coadjutor, to discharge the episcopal duties in his stead; and his recommendation is almost invariably attended to. The emoluments of a bishop arise from his parish, which is generally the best in the diocese, from licenses of marriage, and from the cathedraticum. The last is an annual sum, varying from 2*l.* to 10*l.*, according to the value of the parish, paid by the incumbent in aid of the maintenance of the episcopal dignity. The parochial clergy are nominated exclusively by the bishop. The incomes of all descriptions of the R. Catholic clergy of Ireland arise partly from fees on the celebration of births, marriages, and masses; and partly, and principally, from Christmas and Easter dues, and other voluntary offerings. All places of worship are built by subscription. There are numerous monasteries and convents.

Exclusive of the injustice inflicted on the R. Catholics of Ireland by the seizure of the funds belonging to their church, and their appropriation to the support of the clergy of the church of England, they laboured for a lengthened period under the most degrading disabilities. The treaty of Limerick, in 1691, between the generals of William III. and those of James II., guaranteed to the Irish R. Catholics the same religious privileges they had enjoyed during the reign of Charles II., But this treaty was most shamefully broken; and during the reigns of Anne, George I., and George II., a series of acts were passed, constituting what has been called the Catholic penal code, which had for its object the extermination of the R. Catholic religion in Ireland. It is unnecessary to recapitulate the provisions of these statutes. Their spirit was succinctly and truly described by Mr. Burke:—'The laws made in this kingdom (Ireland) against Papists were as bloody as any of those that had been enacted by the popish princes and states; and when these laws were not bloody they were worse: they were slow, cruel, outrageous in their nature, and kept men alive only to insult in their persons every one of the rights and feelings of humanity.' (Letter to Sir H. Langrishe.)

It is well known that this atrocious code entirely failed of its object, and that, instead of being exterminated, the R. Catholic religion gained new strength and vigour from the persecution to which it was exposed.

> 'Per damna, per cædes, ab ipso
> Ducit opes animumque ferro.'

In the earlier part of the reign of George III., the leading statesmen of England became alive to the impolicy and mischievous operation of parts, at least, of the penal code; and its more offensive provisions were gradually repealed. In 1793, the elective franchise was conceded to the R. Catholics; but they continued, down to a comparatively late period, to be excluded from the privilege of having seats in the legislature, of being members of corporations, and of holding numerous public offices of trust and emolument. At length, in 1829, the R. Catholics were fully emancipated from all civil disabilities on account of religion, and were placed, as respects their political rights and franchises, nearly on the same footing as Protestants.

That this measure was a great boon to Ireland is most true; but though it allayed, it was not enough to extinguish, religious feuds and animosities. Justice, and the most obvious dictates of policy, require, as already stated, either that the R. Cath. should be made the established religion of Ireland, or, at all events, that the R. Cath. clergy should participate, proportionally to the number of their flocks, in the emoluments

Digitized by Google

now exclusively engrossed by the clergy of the church of England. It is a contradiction and an absurdity to suppose that a great and decisive majority should ever quietly submit to be deprived of privileges possessed by a minority. This, however, is the state of things in Ireland; and, till it be radically and completely changed, the country will no doubt continue, as heretofore, to be disgraced and distracted by religious dissensions.

The Protestant dissenters are found chiefly in Ulster. They are classed in congregations, an indefinite number of which forms a presbytery, and delegates, partly ministers and partly lay elders, form the general synod, which regulates the ecclesiastical concerns of the body, and is presided over by a moderator chosen annually. The synod of Ulster is coexistent with the establishment of the Presbyterian doctrine and discipline in Ireland. The Southern Association, or Presbyterian synod of Munster, was formed about 1660: the Presbytery of Antrim separated from the synod of Ulster in 1727, and the Remonstrant synod in 1829.

The Methodists are divided into two societies—the Wesleyan and the Primitive Wesleyan. The Independents, or Congregational Union, form a separate body from Presbyterians or Methodists. The Society of Friends, or Quakers, are most numerous in Dublin, Cork, Queen's Co., and Armagh, but they numbered altogether only 1,348 at the census of 1861. The United Brethren, or Moravians, have establishments in Dublin and Antrim.

The numbers attached to the three principal religious bodies in Ireland are given in the subjoined table, which shows by provinces, counties, cities and corporate towns, the religious professions of the inhabitants on the night of the 7th April, 1861.

Provinces, Counties, Cities, and Towns	Established Church	Presbyterians	Roman Catholics	Total
LEINSTER:				
Carlow County	6,229	106	50,539	57,137
Drogheda Town	1,031	207	13,342	14,740
Dublin City	49,251	4,875	196,549	254,808
Dublin Suburbs	17,668	1,724	29,639	50,485
Dublin County (exclusive of Suburbs of City	18,914	936	83,556	104,959
Kildare County	10,439	876	79,121	90,946
Kilkenny City	1,242	97	12,769	14,174
Kilkenny County	4,750	127	105,356	110,341
King's ,,	9,109	327	79,955	90,043
Longford ,,	6,196	560	64,801	71,694
Louth ,,	5,203	937	69,678	75,973
Meath ,,	6,492	428	103,327	110,373
Queen's ,,	9,683	240	80,025	90,650
Westmeath ,,	6,356	343	83,749	90,879
Wexford ,,	12,759	287	130,103	143,954
Wicklow ,,	15,285	285	70,044	86,479
Total of Leinster	180,587	12,355	1,252,553	1,457,635
MUNSTER:				
Clare County	3,323	228	162,612	166,305
Cork City	10,632	881	67,148	80,121
Cork Co., East Riding	18,279	899	264,754	286,396
Cork Co., West Riding	14,543	219	162,140	178,301
Kerry ,,	6,200	243	195,159	201,800
Limerick City	4,238	418	39,124	44,476
Limerick County	5,648	148	166,604	172,801
Tipperary Co., North Riding	7,359	194	101,171	109,220
Tipperary Co., South Riding	5,441	304	133,710	139,886
Waterford City	1,989	234	20,429	23,293
Waterford County	3,208	245	107,225	110,959
Total of Munster	80,860	4,013	1,420,076	1,513,558
ULSTER:				
Antrim County	45,275	131,687	61,369	247,564
Armagh ,,	58,735	30,746	92,760	190,086
Belfast Town	30,080	42,604	41,406	121,602
Carrickfergus, Co. of Town	1,821	5,582	1,046	9,422
Cavan County	23,017	5,352	123,942	153,906
Donegal ,,	29,943	26,215	178,182	237,395
Down ,,	60,657	133,421	97,240	299,302
Fermanagh ,,	40,608	1,909	59,751	105,768
Londonderry ,,	31,218	64,602	83,402	184,209
Monaghan ,,	17,721	15,149	92,799	126,482
Tyrone ,,	52,240	46,568	134,716	238,590
Total of Ulster	391,315	503,835	966,613	1,914,236
CONNAUGHT:				
Galway Town	837	189	15,621	16,967
Galway County	7,365	392	246,330	254,511
Leitrim ,,	9,488	338	94,006	104,744
Mayo ,,	6,739	961	246,583	254,796
Roscommon ,,	5,728	277	151,047	157,272
Sligo ,,	10,438	931	112,436	124,845
Total of Connaught	40,595	3,088	866,023	913,135
Persons at Sea on Census Night	—	—	—	403
Total of Ireland	693,357	523,291	4,505,265	5,798,967

It will be seen that there were, at the census of 1861, out of every hundred persons, 12 belonging to the Established church, 10 Presbyterians, 77 Roman Catholics, and one per cent Protestant and other dissenters.

Education.—The principle of educating the great body of the people was fully recognised at the Reformation. An act of 28 Henry VIII. bound every beneficed clergyman by oath, on his incumbency, to keep or cause to be kept a school in his parish. A subsequent act of Elizabeth required the bishop and beneficed clergy of every diocese to maintain a grammar-school. But in nine cases out of ten, the oath and the act were alike disregarded; and the few schools that were organised were founded on sectarian principles, being intended for the exclusive use of the dominant sect. In 1733, a society was established by charter, for founding schools at the public expense, in which the children of the poor should be taught the elements of literature, and instructed in useful works. But though the avowed, this was not the real object of this society, which exerted itself to undermine the Catholic religion by educating Catholic children in the principles of the Protestant faith. But this attempt at proselytism was soon discovered; and the schools were deserted by all but Protestants. In 1815, a society in Dublin, for the suppression of vice, received a large parliamentary grant for the instruction of the poor on the principles of the established church; and, in 1819, a society for the instruction of the poor, but professing to avoid any interference with the religious opinions of the pupils, received a much larger annual grant. The latter of these associations was called the *Kildare Street Society*, from the place of its meetings.

These societies failed, however, in producing a general effect. The grants of public money, by which the chartered schools were chiefly maintained, were withdrawn, from a conviction of their inefficacy, and of the abuses which had crept into their management. The grants to the society for the suppression of vice, and the Kildare Street Society, were also withdrawn, in consequence of

Digitized by Google

their want of success, and of their real or supposed interference with the religious tenets of the pupils. In 1833, the public money hitherto parcelled out among these associations was vested in the lord lieutenant, to be expended in promoting the education of the children of every religious denomination under the superintendence of commissioners forming a board of National Education. Education in the national schools is strictly confined to the common and most useful branches of secular knowledge, the religious instruction of the pupils being, in every case, left to the care of their parents and the clergy of the denominations to which they belong.

The total number of national schools in Ireland, on the 31st of December of each year, was 5,632 in 1860; 5,830 in 1861; and 6,010 in 1862. The average number of children in daily attendance was 262,823 in the year 1860; 284,726 in 1861; and 284,912 in 1862.

The subjoined tables show the sums received and expended for the purpose of National Primary Education in Ireland in each of the years, ended 31st Dec. 1860, 1861, and 1862:—

Receipts	1860	1861	1862
	£	£	£
Balance from previous Year	15,841	44,954	45,862
Grants from the Treasury (on account of Votes)	284,468	286,722	269,377
For Books and Requisites sold to the National Schools at reduced prices	8,906	10,367	9,534
For Sale of Farm and Garden Produce	5,626	5,837	4,677
School Fees	2,481	2,930	3,953
Miscellaneous	4,275	1,700	1,494
Total	321,597	352,510	334,897

Expenditure	1860	1861	1862
	£	£	£
Salaries, Gratuities, and General Expenditure for Schools	207,184	227,695	245,289
Inspection	21,774	21,166	21,446
Printing, Binding, and Purchase of Books and for other School Requisites	17,233	36,936	25,714
Central Official Establishment	14,388	14,725	15,004
Buildings	—	—	2,500
Miscellaneous	16,063	6,126	2,436
Total	276,642	306,648	312,389

The commissioners comprise some of the highest dignitaries, both of the Protestant and R. Cath. churches, and some distinguished Protestant and Catholic laymen. They seem to discharge their important functions with great diligence and impartiality. The schools they assist in establishing appear to be making the most satisfactory progress; and will, no doubt, be productive of great public benefit.

Of the children educated, fully one-seventh are Protestants, which seems a fair proportion, as the Protestant poor certainly do not exceed one-seventh part of the poor of Ireland.

There are several collegiate institutions for instruction in the higher departments of science and literature. Among them are Trinity College, Dublin, the only university entitled to confer degrees in all the faculties, the R. Catholic College at Maynooth, the Academical Institution in Belfast, and others. Some details relating to each of these are given in the accounts of their respective localities. (See DUBLIN, MAYNOOTH, BELFAST.)

More recently, however, or in 1845, an act was passed (8 & 9 Vict. c. 66) for founding new colleges in Ireland with liberal endowments, on an enlarged and comprehensive plan. In pursuance of this act, colleges, denominated the 'Queen's' have been opened in Belfast, Cork, and Galway. The professors have been selected with the greatest care, regard being solely had to their moral, literary, and scientific character, without inquiring or caring whether they were R. Catholics or Protestants. Religious instruction is given in the class-rooms of the colleges, but attendance at such times is quite voluntary on the part of the students; and no religious test, qualification, or declaration is required to enable any one to enter the college, or to contend for its honours and prizes. These institutions were intended by the late Sir Robert Peel, by whom they were founded, to furnish the best classical, literary, and scientific education to all ranks and orders of Her Majesty's subjects; and they appear eminently well fitted to realise these objects.

Poor.—Notwithstanding the great natural advantages of the country, it has been overspread with a population, in such depressed circumstances as to be involved in the extreme of destitution on any failure of the crops; and there is also, at all times, much suffering among the lower classes of the people. Down to a recent period there was no efficient provision for the relief of the poor, who, in consequence, had to depend wholly on private benevolence. Mendicity was practised to an extraordinary extent, and strangers in Ireland were shocked by the swarms and disgusted by the importunity of beggars of all ages and sexes, and in the most abject state of poverty, that infested the roads and public places. Such a state of things was a disgrace to a country pretending to be civilised. But discreditable as it was, it could not be materially improved without instituting a compulsory provision for the support of the poor, which was long successfully resisted, through the prevalence of unfounded theories with respect to its operation in this country. At length, however, sounder opinions gained an ascendancy; and parliament became impressed with the conviction that it was indispensable, in order to preserve the tranquillity of the country in seasons of scarcity, to make more effectual provision for the support of the poor. This was done by an act passed in 1838, which introduced the principle of compulsory assessment for the poor into Ireland; and which, while it served to protect the population from falling a sacrifice to the extremity of want, was a new and powerful motive to the landlords to oppose the splitting of farms, and to take a greater interest than they previously did in the condition of the cottiers and others inhabiting their estates. In both these respects, the compulsory assessment has been eminently useful. The system is placed under the control of the poor law commissioners for England, and is extended over the whole country.

The poor law came into operation in 1839, but none of the workhouses were opened for the admission of paupers till 1840. Since 25th March, 1846, all the workhouses in Ireland have been open, and a rate has been made in every union. The subjoined tabular statement gives the total amount received from poor rates, and other receipts in aid of poor rates, as well as the total expended in each of the fifteen years—ending Lady day—1850–64:—

Digitized by Google

Years ending Lady-day	Total Amount received from Poor Rates and other Receipts in aid	Total Amount Expended in the Relief and Management of the Poor
	£	£
1850	2,084,290	1,827,212
1851	1,185,785	1,293,039
1852	1,242,446	1,175,083
1853	1,133,009	1,070,499
1854	1,052,250	990,034
1855	898,674	851,876
1856	793,980	734,5 8
1857	650,071	619,514
1858	545,459	570,372
1859	535,906	524,754
1860	508,943	530,626
1861	573,290	595,192
1862	667,745	652,245
1863	721,903	701,031
1864	745,535	732,969

The amount expended includes expenses under the Burial Grounds Acts and Registration of Births, Deaths, and Marriages Acts.

The subjoined table gives the number of paupers in receipt of relief in unions in Ireland at the close of the first week of January in each year:—

Years	Indoor Paupers	Outdoor Paupers	Total
1850	203,320	114,650	307,970
1851	206,468	2,719	209,187
1852	168,248	3,170	171,418
1853	138,764	3,058	141,822
1854	104,604	2,198	106,802
1855	85,296	1,523	86,819
1856	72,247	836	73,083
1857	55,183	911	56,094
1858	49,308	1,274	50,582
1859	43,599	1,267	44,866
1860	43,218	1,711	44,929
1861	47,352	3,331	50,683
1862	55,168	4,373	59,541
1863	60,038	5,800	65,847
1864	59,867	7,753	68,136

It will be seen that there is a steady and most hopeful decrease of pauperism in Ireland.

Races, Character, and Condition of the People.—The first inhabitants of Ireland, of whom history has preserved any account, belonged to the great Celtic family. Much ingenious conjecture has been expended on the question whence Ireland derived her earliest colonists; and the claims of Britain, France, Spain, Scythia, and even Troy, to the honour of being the mother country of the Irish, have all been supported with some learning and much confidence. It may be enough to observe that, owing to greater proximity to the Continent, it is most probable that Britain was peopled before Ireland; and the latter being nearer to Britain than to the Continent, it is for the same reason most probable that she was either wholly peopled from Britain, or principally from her, but partly also from Gaul.

Though there be no direct evidence of the fact, it may be inferred that Ireland was visited at an early period by Phœnician, or rather Carthaginian ships; but, in those days, this must have been a long and perilous voyage; and there are no grounds for thinking that it was of common occurrence, or that the Phœnicians ever made any settlement in the country.

The Irish belong to what is called the Gaelic division of the Celtic family; having, as is supposed, emigrated from Britain when the latter was invaded and settled by the Cimbri or Northern Celts. About the period when the Romans withdrew from Britain, a tribe called the *Scoti* began to acquire a preponderating influence in Ireland, which, from the 5th to about the 11th century was thence called *Scotia*. But about the latter period this tribe, having effected a settlement on the W. coast of N. Britain, its name was transferred to that country, which still retains it, and Ireland again recovered its old name of Hibernia, Ierne, or Ireland. The greatest diversity of opinion exists, and an almost impenetrable obscurity hangs over every circumstance connected with the establishment of the Scoti in Ireland. Colonists from Belgium are known to have settled in it, and some suppose that they were the progenitors of the Scoti; but this is disputed by others, who contend that the settlement of the Scoti in Ireland is comparatively recent; and that they were of Scandinavian origin.

But though these Belgian or Scandinavian immigrants succeeded in obtaining an ascendancy in parts of Ireland, they were not sufficiently numerous to make any considerable change in the language, character, or institutions of its Celtic inhabitants. 'The conquering tribes themselves, one after another, became mingled with the general mass, leaving only in those few Teutonic words, which are found mixed up with the native Celtic, any vestige of their once separate existence.' (Moore's Ireland, i. 98.)

The number of English settlers in Ireland was long inconsiderable. Till the plantation of Ulster, in the reign of James I., they were almost entirely confined to the E. and SE. counties, where, though they had partially changed the language, they had effected comparatively little change in the habits and manners of the people. The pop. of Connaught, and generally of all the western and of a large portion of the other parts of the island, may, even at this day, be considered as of nearly pure Celtic origin; and in several of the remoter districts Celtic is even now the ordinary language of the common people. Notwithstanding the differences that may easily be traced in different parts, from the intermixture of English and Scotch blood, the entire pop. has a peculiar and distinctive character, that is not to be mistaken. It may, in general, be said of the Irish, that they are ardent in their affections, credulous, vain, fond to excess of flattery, irascible, easily influenced by sudden impulses, uncertain, and usually in extremes. Hence the facility with which they have been duped by the merest impostors; and their proneness to believe every falsehood, how gross soever, that flatters their prejudices. They are in general destitute not merely of the foresight and prudence, but also of the resolution and steady perseverance of the English and Scotch; and though their bravery is unquestionable, and they will undertake anything, they are very apt, if they do not succeed at the first onset, to become dispirited, and to despond. They are eminently witty, hospitable, and social, though often parsimonious. Prodigality is one of their distinguishing traits; as is their light-hearted, contented disposition; but this frequently degenerates into thoughtlessness; and, how advantageous soever in some respects, by disposing them to be satisfied with existing circumstances, it tends to hinder their making any persevering and well-concerted efforts for their improvement.

Dr. Crumpe, an intelligent physician of Limerick, who received a prize from the Royal Irish Academy for the best essay on the employment of the people, has the following statements with respect to the character of the lower Irish:—'Two leading and naturally allied features in the character of the lower Irish are idleness and inquisitiveness, especially when hired and employed to perform the work of others. The moment an

Digitized by Google

overseer quits them, they inevitably drop their work, take snuff, and fall into chat as to the news of the day; no traveller can pass them without diverting their attention from the business in hand, and giving rise to numerous surmises as to his person, errand, and destination. The most trivial occurrence, especially in the sporting line, will hurry them, unless restrained, from their occupations. Even the sedentary manufacturer will, on such occasions, quit his employment. Nothing is more common than to see a weaver in the N. start from his loom on hearing a pack of hounds, and pursue them through a long and fatiguing chase. A tendency to pilfering and theft is very predominant among them, and connected with this vice is the prevalence of low cunning and lying; and, as their accompaniment, may be mentioned a fawning flattery. The blunt honesty, the bold independence of the English yeoman, are wanting; and in their stead too generally substituted the petty dishonesty of the vassal, the servility and artifice of the slave. Drunkenness is an evil of considerable magnitude in the catalogue of national vices. It is one to which the lower Irish are peculiarly addicted, and that from which the most serious obstructions arise to their industry and employment. That vile beverage, whisky, so cheaply purchased, and so generally diffused, affords them an easy opportunity of gratifying this destructive passion. As one consequence of the general prevalence of ebriety, the lower Irish are remarkably riotous. I do not here so much allude to Whiteboyism, and other public disturbances, which owe their origin chiefly to other causes, as to their quarrels among themselves. Their fairs are frequently the scenes of confusion, riot, disturbance, and bloodshed. Combinations, too, risings, and outrage among tradesmen, are far from unusual, and on pretexts that are truly ridiculous. The Irish are also, to a remarkable degree, lawlessly inclined. It is well known that, instead of being anxious to apprehend offenders, or to assist the execution of the law, they are, in general, ready to give the former every assistance to escape; and to resist the latter, unless awed by a superior force.' (Essay, pp. 170–175.)

This, though not a very flattering, seems a perfectly fair statement. But some, at least, of the defects of national character, specified by Dr. Crumpe, originate in circumstances that either have been, or admit of being, obviated. Drunkenness is now in a fair way of being expunged from the list of Irish vices; and with it will disappear the riots and disturbances to which it gave birth. The idleness of the Irish, though in part constitutional, is in part, also, a consequence of the minute division of the land, and of the impossibility of its occupiers finding any regular or continuous employment. Their proneness to combination and outrage, their readiness to obstruct the course of law, and to assist the escape of malefactors, were formerly promoted, if not occasioned, by oppression and misgovernment, and now they are the results of their desperate efforts to keep possession of their patches of land. Down to a comparatively recent period the native Irish had not, and could not be expected to have, any confidence in the law. They were, in fact, a proscribed and enslaved race, among whom it would have been preposterous to look for 'blunt honesty' and 'bold independence.' And notwithstanding the 'oppression and extortion' to which the Irish were formerly subject have disappeared, their effects will, it is to be feared, be long visible, and with the defects inherent in their character will make their regeneration a work of extreme difficulty. Agitation is still rife in the land. The peasantry are taught to ascribe all the ills with which they may be visited to misgovernment, or to their connection with England. Nothing is ever set down to account of their own improvidence, or want of industry. On great emergencies, such as a scarcity of food, or of employment, they become quite paralysed; and instead of exerting their energies, sink into despair, or, at best, abuse the government which feeds them. These evils can only be modified by slow degrees; by government pursuing a consistent and impartial course; placing the Catholics on a level with the Protestants, in respect of religious endowments as well as of civil rights; diffusing sound instruction; discouraging agitation; enforcing, at all hazards, the empire of the law; and adopting every practicable method for preventing the further splitting of the land, and for promoting its consolidation into larger farms.

Wages in Ireland vary from about 1*s.* to about 6*d.* a day; but at neither rate is employment constant, and in parts of the country half the labourers are all but unoccupied for nearly half the year. Under such circumstances, it is needless to add that their food and clothes must, speaking generally, be of the most inferior description. In these respects, however, there are some material differences; and in the NE. and eastern counties, but especially the first, the condition of the peasantry is much superior to what it is in the SW. and W.

In the north eastern counties they are better lodged, clothed, and fed than in the others: the wages of labour are higher, being, at an average, about 1*s.* per day; and their food consists chiefly of meal, potatoes, and milk. The inhabitants here are a frugal, industrious, and intelligent race; inhabiting a district for the most part inferior, in natural fertility, to the S. portion of Ireland, but cultivating it better, and paying higher rents in proportion to the quality of the land, notwithstanding the higher rate of wages.

In the southern districts there is a population whose condition is, in every respect, inferior to that of the northern. Their habitations are worse; their food inferior, consisting at best of potatoes and milk, without meal: the wages of labour are found reduced from 1*s.* to 8*d.* per day; yet the peasantry are a robust, active, and athletic race, capable of great exertion, often exposed to great privations, ignorant, but eager for instruction, and readily trained, under judicious management, to habits of order and steady industry.

The population of the midland and eastern districts does not differ materially in condition from those of the south; but the inhabitants of the western district are decidedly inferior to both, in condition and appearance: their food consists of the potato alone, without meal, and in most cases without milk; their cabins are wretched hovels; their beds straw; the wages of labour are reduced to the lowest point, upon an average not more than 6*d.* per day. Poverty and misery have deprived them of all energy; labour brings no adequate return, and every motive to exertion is destroyed. Agriculture is in the rudest and lowest state. The substantial farmer, employing labourers, and cultivating his land according to the improved modes of modern husbandry, is rarely to be found amongst them. The country is covered with small occupiers, and swarms with an indigent and wretched population. It is true, that some landed proprietors have made great exertions to introduce a better system of agriculture, and to improve the condition of their immediate tenants; and a few of the lesser proprietors have made humble attempts to imitate them; but the great mass of the population exhibits a state of poverty bordering on destitution.

Digitized by Google

The distinctions as to the usual diet of agricultural labourers in the different parts of Ireland, are strictly applicable to those only who have regular employment. When they are out of work, which is the case in many places during three or four months of the year, the line is not so easily perceived. Then a reduction in the quantity as well as in the quality of their food takes place; but still, though on a diminished scale, their relative local degrees of comfort or of penury are maintained nearly according to the above classification. In no extremity of privation or distress have the peasantry of the northern counties approached to a level with those of the W.; while Leinster and the greater part of the S., though sometimes reduced to the lowest condition, retain, generally, even in the most calamitous periods, a shade of superiority. There are districts, indeed, in every quarter of the land, where through peculiarities of situation, or other causes, distress falls with an equal pressure upon all; but such exceptions are rare, and so limited in extent, as scarcely to qualify the foregoing observations.

History.—The early accounts of Ireland are singularly disfigured by fable. It was not invaded by the Romans, whose knowledge of it could, therefore, be derived only from the reports of the Britons, or of natives of Ireland in Britain. The fair presumption, however, is, that its inhabitants were then more barbarous than even those of Britain. Pomponius Mela, who has given an accurate account of the soil of Ireland, and of the richness of its pastures, says, '*Cultores ejus inconditi sunt, et omnium virtutum ignari, pietatis admodum expertes.*' (Lib. iii. sec. 6.) Strabo (lib. iv.) gives some extraordinary details respecting the Irish, which, however, he does not state on his own authority, but merely as having been reported to him. In the 5th century Christianity was introduced into Ireland by St. Patrick, a native of N. Britain, who, in his youth, had been carried a captive into Ireland. Along with the gospel the British missionaries introduced the letters and learning of Rome; and a school founded at Armagh, not long after, became famous in most parts of Europe. But it would be as inconsequential to infer, from the fact of this and a few other schools existing in the country, that it was then distinguished by literature and civilisation, as it would be to allege that such was the case with the Western Islands, and the adjacent parts of the mainland of Scotland, in the 8th century, because there was then a celebrated monastery and school in Iona.

The accounts of the political state of Ireland, previously to the English invasion, are obscure and contradictory. This much, however, may be gleaned from them, that the island was parcelled out into a number of semi-independent states, which sometimes did, and sometimes did not, acknowledge their dependance on a chief prince or king of all Ireland. Incessant hostilities were waged by the petty sovereigns against each other, which were not even interrupted by the invasion of the Danes in the 9th century. The latter, in no very long space, became masters of the greater part of the coasts of the island; and occupied the ports of Dublin, Wexford, Waterford, and Cork, where they were taken by the English.

The successors to the petty sovereigns, or to the chiefs of clans or septs, were called *tanists*, and were generally elected from the family or kindred of the reigning prince or chieftain during his lifetime. Females were excluded from the succession, and minors were never chosen as tanists; the object being to have a prince of mature years always at the head of the seigniory or clan, who might be able to direct their operations, and to defend them from hostile attacks. The laws of the Irish were such as might be expected to prevail among a rude and barbarous people; and were administered in the open air by hereditary judges, denominated *brehons*. The most atrocious crimes might be compounded for by the payment of an *eric*, or fine; and as in all cases a considerable portion, and in some cases the whole, of the fine went to the lord, or chief of the sept, his interest obviously led him to encourage rather than to repress crime. The laws with respect to the succession to fixed property were such as would have alone served to extinguish all industry. 'Through the whole country,' says Leland, 'the tenure of lands determined with the life of the possessor; and, as the crimes or misfortunes of men frequently forced them from one tribe to another, property was eternally fluctuating, and new partitions of lands made almost daily. Hence the cultivation of lands was only in proportion to the immediate demands of nature, and the tributes to be paid to superiors.' (Hist. of Ireland, Introduction, p. 34.)

A people with such institutions could not be otherwise than barbarous; and such, in fact, they were. They had made little or no progress even in the most necessary arts; and were, with few exceptions, entire strangers to civilisation and refinement. 'Neither was it possible to reform the evil customs that prevailed among the Irish, without altering their government; nor could that be accomplished by any other means than by their being subjected to some more civilised foreign power.' (Lyttleton's Henry II., v. 56; where the reader will find an excellent account of the state of Ireland previously to the English invasion.)

Soon after the English conquest effected by Henry II., in 1171, the island was divided by John into 12 counties. But, though the king of England received the submission of the Irish chieftains, and was nominally lord of Ireland, his authority was, for a lengthened period, only partially recognised. The native families of O'Conor, O'Neil, O'Melaghlin, Byrne, and O'Toole, still asserted, and, to a certain degree, exercised sovereign authority in Connaught, Ulster, and part of the midland districts. Even in Leinster and Munster, where the English were principally settled, and which had partially adopted the laws and constitution of England, the sovereign authority was far from being generally or firmly established. The allegiance of several of the great feudal barons, who held extensive tracts of land, was frequently little better than nominal. The English families of De Burgh in the W., of Desmond in the S., and of Butler in the central parts, adopted the manners of the natives, and often became the declared and most dangerous enemies of their mother country. At one time there were 9 counties palatine, with independent jurisdiction, in the part of the island subject to England, and distinguished by the name of the *pale*. The miseries resulting from the interminable disorders inseparable from such a state of things, were increased in 1315 by an invasion of the Scotch, under Edward, brother of Robert Bruce. He overran the greater part of the country, but was finally defeated and killed near Dundalk. The resources of the country were also wasted in subsidies, and its youth carried away to fight the battles of their masters on the continent, or in England, during the wars between the houses of York and Lancaster. After the death of Richard III. and the accession of Henry VII. had terminated this sanguinary struggle, Ireland was chosen by the defeated party of the Yorkists as a theatre on which to commence a system of operations for the dethronement of the new

Digitized by Google

monarch. In consequence, Lambert Simnel was sent thither by the Duchess of Burgundy as the descendant and representative of Edward IV. His title was acknowledged by the Anglo-Irish, and he was crowned in Dublin with all the ceremonies attendant on the inauguration of the ancient Irish sovereigns. A similar, though less vigorous, effort was afterwards made in favour of Perkin Warbeck, whose title was also acknowledged in the S. of Ireland.

In 1495, a parliament assembled at Drogheda, under the presidency of Sir Edward Poynings, then lord-deputy, passed some very important statutes. By one of these, afterwards well known in Irish history by the name of 'Poynings' Law,' effectual provision was made for maintaining the ascendancy of the government of England over the legislature of Ireland. With this view it was enacted, that no parliament should in future be holden in Ireland without license from the king; and that no bill or draft of a law should be submitted to its consideration, without having been previously sent over to England by the Irish government for the approval, alteration, or rejection of the king; so that the power of the Irish parliament was thus, in fact, limited to the mere acceptance or rejection of bills approved or modified by the English government.

This act was much and justly complained of at a later period; but, when passed, it was a decidedly popular measure. Parliaments had previously been, for the most part, the mere instruments of the faction that happened to be ascendant at the time; so that their enactments were often conflicting, and the administration wanted consistency. Poynings' law obviated, in some measure, these defects; and parliament henceforth became dependent rather on the government of England than on any particular faction or party in Ireland.

Early in the reign of Henry VIII. the spirit of insurrection broke out in a formidable shape. The chief authority had previously been exercised for a lengthened period by the rival families of the Fitzgeralds and Butlers, whose heads were the Earls of Kildare and Ormond. The former of these noblemen was at this period lord-lieutenant. On being summoned to England, to answer charges brought against his government, he appointed his son, Lord Thomas Fitzgerald, his deputy. The latter, on a false rumour of his father's execution in London, not only threw up the reins of government, but declared himself an open enemy to the English monarch, ravaged the pale, and laid siege to Dublin, where he was repulsed by the gallantry of the citizens. Having soon after surrendered to Lord Grey, the new lord-lieutenant, he was sent prisoner to England, where he expiated his offences on the scaffold, along with several of his near relations, who, though unconnected with his acts, were unjustly implicated in their consequences.

The introduction of the Reformed doctrines, which was effected with equal violence and contempt for the prejudices of those within and without the pale, brought a new element of discord into Ireland. The native Irish were devoted adherents of the church of Rome. Their hostility to the new doctrines did not, however, display itself openly during the reign of Henry, who, about this time, changed his title of lord to that of king of Ireland, nor in the reign of his Protestant successor, Edward VI.; but it broke out with unrestrained fury in that of Elizabeth. O'Neil, who possessed nearly the whole of Ulster, instigated by the court of Spain, hoisted the standard of rebellion. He was supported by a Spanish armament, which took possession of Kinsale, without, however, being able to maintain itself in that position. After a lengthened contest O'Neil was forced, by the energetic and prudent measures of Lord Mountjoy, to an unconditional submission; and his subsequent flight from Ireland, on the imputed charge of another insurrection, terminated the war. Ulster was soon after divided into counties, and planted with numerous bodies of English and Scotch settlers, which laid the foundations of the improvement of that province, and gave it a distinctive character. The reign of James I., and the earlier part of that of Charles I., formed a period of undisturbed tranquillity. But the disputes between the latter and the English parliament afforded the Irish a flattering though fallacious prospect of regaining their independence and re-establishing their religion. To effect this object, an insurrection was secretly organised, on a very extensive scale, embracing, not only the native Irish, but many Rom. Cath. families of English descent. This formidable conspiracy broke out in 1641. The treachery of one of the conspirators prevented Dublin from falling into their hands; but the insurrection broke out simultaneously in Ulster, and soon after spread into most other parts of the country. The most horrible excesses were committed by the conspirators, which were sometimes fearfully retaliated; and the country continued to be a prey to all the horrors of civil war till 1649, when Cromwell appeared in the field, at the head of a well-disciplined and powerful army. Having taken Drogheda by storm, he delivered it up to military execution; and such was the terror inspired by the fate of this city, that almost all the strongholds belonging to the party of the Catholics soon after fell into his hands, and the English supremacy was, for the first time, established in every part of Ireland. The confiscations that followed Cromwell's success were upon so vast a scale that about *four-fifths* of the soil was transferred to new proprietors, either parliamentary soldiers, or speculators, called adventurers, who had advanced money to carry on the war.

After this tremendous visitation Ireland continued tranquil, and began to advance considerably in prosperity, till the events connected with the Revolution of 1688 again made it the theatre of fresh and sanguinary contests. After the flight of James II. from England, he landed, with a view to retrieve his fortunes, in Ireland, where he was received with open arms by the Catholics; and having brought with him from France a number of experienced troops and officers, partly Irish and partly French, he soon found himself at the head of a powerful army. However, he was wholly without the talents necessary to ensure success in such an enterprise. The battle of the Boyne, on the 1st of July, 1690, gained by William III., turned the scale completely in favour of the latter; and the battle of Aughrim, on the 12th of July, 1691, when the British under Ginkell, afterwards earl of Athlone, obtained a decisive victory over the troops of James II., commanded by St. Ruth, who fell in the action, was the last great effort made by the Irish to achieve their independence. The remains of the Irish forces, having retreated to Limerick, capitulated under conditions embodied in the famous convention called the treaty of Limerick. The violation of this treaty has already been noticed. It is due to the memory of William III. to state, that he was no willing party to its violation. This is entirely to be ascribed to the intolerance of the English and Irish Protestants, who, flushed with victory, did not hesitate, despite the stipulations to the contrary in the treaty, to trample the Catholics under

Digitized by Google

foot, and as far as possible to exterminate their religion. 'By the total reduction,' says Mr. Burke, 'of the kingdom of Ireland, in 1691, the ruin of the native Irish, and in a great measure, too, of the first races of the English, was completely accomplished. The new interest was settled with as solid a stability as any thing in human affairs can look for. All the penal laws of that unparalleled code of oppression, which were made after the last event, were manifestly the effects of national hatred and scorn towards a conquered people, whom the victors delighted to trample upon, and were not at all afraid to provoke. They were not the effects of their fears, but of their security. They who carried on this system looked to the irresistible force of Great Britain for their support in their acts of power.' (Letter to Sir H. Langrish, p. 44.)

The violation of the treaty of Limerick being accompanied by the most extensive confiscations, and followed up by the enactment of the penal code, completed the prostration of Ireland. There being no longer any means of rising, nor even security at home, the aspiring Catholic youth sought employment and distinction in the service of France, which, for a lengthened period, drew large supplies of recruits from Ireland. Hence, by a singular contradiction, the same revolution that established freedom of conscience and a liberal system of government in England and Scotland, established an odious despotism and persecution in Ireland. In the words of Mr. Burke, 'it established, in defiance of the principles of *our* revolution, the power of the smaller number, at the expense of the religious liberties of the far greater, and at the expense of the civil liberties of the whole.' But, as already stated, the penal code failed to effect its object; and, instead of being exterminated, the Catholics gradually acquired a still greater numerical superiority. At length, in the earlier part of the reign of George III., the rigour of the code began to be abated, and the Catholics ceased to be regarded as mere *feræ naturæ*.

One of the most curious chapters in Irish history is that connected with the embodying of the volunteers in 1782, and the revolution that was soon after effected in the constitution of Ireland. The difficulties in which Great Britain was then involved having occasioned the withdrawal of the greater number of the troops from Ireland, rumours were propagated of an expected invasion of the island by the French; and, to meet this contingency, the Protestants of Ulster and other parts took up arms, and formed themselves into volunteer corps. These bodies soon became sensible of their strength; and having appointed delegates and concerted measures, they proceeded to set about reforming the constitution. In this view they published declarations to the effect, that Ireland was a free and independent kingdom, and that no power on earth, except that of the king, lords, and commons of Ireland, could legally enact laws to bind Irishmen. These declarations, which struck a direct blow at the superiority hitherto claimed and asserted by the British parliament, might, and most probably would, at another time, have been successfully resisted. But Great Britain, being then engaged in a desperate contest with her revolted colonies, and with almost all the great European powers, prudently made the concession demanded by the Irish volunteers; and the *Independence of Ireland* was proclaimed amid the most enthusiastic demonstrations of popular rejoicing.

In truth, however, this independence was apparent only. The wretched state of the elective franchise in Ireland was totally inconsistent with anything like real independence; and so venal was the Irish parliament, that any minister, how unpopular soever, had no difficulty in securing a majority in that assembly. Hence the anticipations in which the more sanguine Irish patriots had indulged were destined soon to experience a most mortifying disappointment; and this, and the hopes inspired by the French revolution, terminated in the rebellion of 1798, which was not suppressed without a repetition of the former scenes of devastation and bloodshed.

The British government at length wisely determined to effect a legislative union between Great Britain and Ireland, and to suppress the separate legislature of the latter. This measure, notwithstanding a strenuous opposition, was happily carried, and took effect from the 1st of January, 1800. And, unless it were resolved or wished to put an end to all political connection between the two countries, nothing could be more inexpedient and absurd than the existence of a separate independent legislature for Ireland. Perpetual jealousies could not have failed to arise between it and the legislature of Great Britain, which must necessarily in the end have led to estrangement, and probably separation. A legislative union was the only means of obviating these and other sources of mischief: its repeal would make Ireland a theatre for all sorts of projects and intrigues, and it would be sure to be followed, at no distant period, by the dismemberment of the empire. Its maintenance should, therefore, be regarded as a fundamental principle of policy; and, to give it permanence and stability, every effort should be made to remove all just grounds of complaint on the part of the Irish people, and to make the union one of national interest and affection, as well as of constitutional law.

IRKUTSK, GOVERNMENT OF. (See SIBERIA.

IRKUTSK, a city of Asiatic Russia, cap. of Eastern Siberia, on the Angarà, at its confluence with the Irkut, about 30 m. from the NW. shore of Lake Baikal, 500 m. SE. Krasnojarsk, and 1,450 m. in nearly the same direction from Tobolsk. Pop. 19,350 in 1858. The town is situated in a wide plain, 1,240 ft. above the level of the sea; the mean temperature of the year being —0·3 R., or rather below the freezing point. The Angarà, which is about 1,000 ft. broad at Irkutsk, divides the city into two nearly equal parts. It is fortified and defended by a citadel, and has 4 suburbs. Of about 1,900 private houses, only 50 are built of stone; the rest are chiefly of wood, or faced with painted planks. The streets are broad, but altogether unpaved; from the solidity of the ground, however, they are not dirty. Irkutsk has 33 churches, 12 of which are constructed of stone; an exchange, also a stone edifice, and a good bazaar with numerous shops. The Baikal admiralty house and building docks on the Angarà, medical college, gymnasium, and *comptoir* of the Russo-American Company, are said to be worthy of a European city; the government-house, theatre, several convents and hospitals, and a prison, are among its other public edifices. It is the seat of an archbishop, and of a Russian governor, whose authority extends over the immense provs. of Irkutsk, Yakutsk, Okhotsk, Kamtschatka, and Russian America, including Bodega and the other settlements on the coast of California, distant nearly 120° long. The town has numerous educational establishments, including, besides the gymnasium, with a library of 5,000 vols., an episcopal seminary, high school of navigation, with classes for instruction in the Tartar, Chinese, and Japan-

Digitized by Google

ese languages; normal, secondary, Lancastrian, and other schools, and a cabinet of mineralogy. It has an imperial factory of woollen cloth for the supply of the troops in Siberia, manufactures of linen and other piece goods, glass, hats, soap, and leather; and is the residence of numerous artisans in the different trades common in Europe. It is the great entrepôt for the commerce of NE. Asia, importing tea, rhubarb, fruit, paper, silks, porcelain, and other manufactured goods from China by way of Kiachta, and furs, &c. from Kamtschatka, the Aleutian Islands, and Russian America; which articles are here exchanged for European goods sent from Petersburg and Moscow by way of Tobolsk. It has also some trade with Bokhara and Khokan. The total annual amount of its commerce is estimated at 4,000,000 paper roubles (or francs), one-fourth of which has sometimes been transacted at its annual fair in June.

IRRAWADI (*Erivati*, 'the Great River'), an important Asiatic river, the principal in India-beyond-the-Brahmaputra. It has its sources near the E. extremity of the Himalaya range in Thibet, about lat. 28° N., and long. 97° 30' E., not far from the sources of the Lohit, a principal branch of the Brahmaputra. With the exception of two reaches to the W., at Bhamo and Ava, it flows generally S. through the centre of the Birman empire, which it traverses in its entire length, till it falls, by numerous mouths, into the Bay of Bengal (or rather the Eastern Ocean), between Cape Negrais and the Rangoon river, in about the 16th deg. of N. lat., and between 93° 20' and 97° E. long. Its course may be estimated at about 1,200 m., during which it passes through 12 degs. of lat. It receives at Yandabo, lat. 21° 43' N., long. about 95° E., its principal tributary, the Ning-thee, or Kyen-dwem, from the N. Its delta commences about lat. 17° 45'. This is a vast alluvial plain, about 130 m. in length, N. and S., and where widest about as many miles across, intersected by a vast number of arms of the river that frequently interlace each other. Of its numerous mouths, the Rangoon and Bassein rivers, forming respectively the E. and W. boundaries of the delta, are the principal. Most of its mouths are navigable for large craft, and those of Bassein and Rangoon for vessels drawing five fathoms water. The harbour of Negrais, formed by the mouth of the river of the same name, is said to be, without exception, the most secure in the Bay of Bengal. The Bassein branch, which may be considered the proper continuation of the main stream of the Irrawadi, is about 700 yards in width at the point where the Rangoon river separates from it. From the apex of the delta to Yedan above Ava, the breadth of the Irrawadi is seldom less than 1 m. and often 4 m. It may be ascended as far as Ava, at all seasons, by vessels of 200 tons; and in the rains they may proceed to the Mogoung river, a sailing distance of about 800 m. from the sea. Above Yedan, the river suddenly contracts to 150 or 200 yards in breadth. It is navigable for canoes up to Bhamo; but in the dry season, it is in many parts dangerous, from its passing over rocky ledges and through precipitous defiles. About 50 m. from its source, it has been observed with a width of 80 yards, during the dry season.

The current is not, in general, remarkably rapid; even above the Mogoung, the Irrawadi, in the dry season, flows only at the rate of about 2 m. an hour. (Malcolm, i. 171.) But in the inundations, from June to Sept., it flows so rapidly that, in the delta, its current would be too powerful for boats to stem were it not for the assistance of the SW. monsoon, which sets in the opposite direction. During its inundation, it has a breadth of about 1 m., above Bhamo, and in some places below Ava of from 4 to 6 m. At the former place its rise is as much as 50 ft., at Ava about 33 ft., at Prome about 30 ft., and in its delta 10 ft. The latter region becomes at that period almost an uninterrupted expanse of water, it being at ordinary times little above the level of high tides. The quantity of water discharged by the Irrawadi, as compared with that discharged by the Ganges, is roughly estimated by Capt. Hannay, in the Asiat. Journ. of Bengal, as 1 to 1·53. In the plain of Pegu, and in the undulating country through which the Irrawadi flows in the middle part of its course, it incloses a great number of islands and sandbanks; though these, in various parts, would seem, from a comparison of the statements of Symes with those of Crawfurd, to be less numerous than formerly. In the upper part of its course, on its left or E. bank, the Irrawadi receives some large affluents, as the Shoomae Kha, Pin-lang or Bhamo river, Lung-tchuen, &c. Its chief affluents on the opposite sides are the Mogoung and Ning-thee, which join it about the middle of its course. The last, as already stated, is its principal tributary; and after its junction, the Irrawadi receives no stream of any importance. Sakaing, the present metropolis, and Ava and Amarapura, former capitals of the Birman empire, Bhamo, the great mart for the Chinese trade with Birmah, Yandabo, Pugan, and Prome, are situated upon the main stream, and Rangoon and Bassein upon the branches bearing their names. Besides these cities, numerous towns and large villages are built on or near the banks of the river, the great mass of the Birmese pop. being accumulated on the Irrawadi, leaving the rest of the country, in great part, an uninhabited desert.

The Irrawadi is to the Birman empire what the Nile is to Egypt, the source of life and abundance, and the main artery and great commercial highway of the country. 'The number of trading boats on the river is astonishing. We pass scores every day, and sometimes hundreds; the largest of them carry 10,000 or 12,000 bush. of uncleaned rice, the smaller 300 or 400. Their chief lading seemed to be rice, salt, and *gna-pee*. In ascending they are for the most part drawn by the crew with a rope upon the bank, or propelled by setting-poles; sailing only when the wind is fair, and neither too strong nor too weak. They are generally from three to four months in ascending from the delta to Ava.

'The boats on this river, though of all sizes up to 200 tons, are of but two general descriptions. All retain the canoe shape, sharp at each end. Large boats have one mast and a yard of long slender bamboo, to which is suspended a square sail. The sail is made in sections, the centre ones only being used in strong winds, and the others added at the sides when necessary. Sometimes a small sail is temporarily fastened above the yards to the ropes, by which it is sustained. The deck extends from 5 to 10 ft. beyond the sides with large bamboos fastened beneath, making at once a platform for the men, when using their setting-poles, &c., and an outrigger to prevent their upsetting. The vessel itself is wholly covered with a regular Birman house, well thatched, which carries part of the cargo, and furnishes cabins to the family and boatmen. Over the roof is a platform, on which the men stand to work the sail. They are manned by from 15 to 25 or 30 men, and sometimes 40 or more.' The smaller-sized vessels are of an elongated shape, like the foregoing, and do not merit a particular description.

'No one can ascend the river without being im-

Digitized by Google

pressed with the hardihood, skill, energy, and good-humour of the Birman boatmen, and the happy adaptation of their boats to the navigation. In ascending, much of the way must be accomplished by setting-poles. For these they use straight bamboos, of a species which is almost solid and very strong. The end is applied not to the front of the shoulder, as with us, but above the collar-bone, or on the top of the shoulder. Bending forward till their hands touch the deck, they bring the resistance perpendicular to the spine, and thus possess far greater power than is possible by our mode. When but slight exertion is required, the pole is applied as with us.' (Malcolm's Trav. in S.E. Asia, i. 90, 91, 96, 97.)

Near the Irrawadi, in the prov. Sarawadi, are celebrated teak forests, covering the hill-ranges bounding the valley. Petrifactions of wood, bones, &c., are common along this river; and Mr. Crawfurd collected on its banks a great number of fossil remains, including those of two species of mastodon, the rhinoceros, hippopotamus, tapir, hog, ox, deer, antelope, gavial, alligator, emys, and trionix. (See Trans. of the Geolog. Soc., and Appendix to Crawfurd's Embassy.) Coal (anthracite) has been discovered along its course, and about 40 m. S. Pugan are some rich petroleum wells on the E. bank, respecting which see BIRMAH.

IRVINE, a royal and parl. bor., sea-port, and market town of Scotland, co. Ayr, on rising ground on the N. bank of the river of the same name, the æstuary of which forms its harbour, on the railway from Glasgow to Ayr, 23 m. SW. the former, and 12 m. N. by W. the latter. Pop. of parl. bor., 7,060 in 1861. A suburb has arisen to the S. of the river, which is connected with the town by a bridge, the widest and handsomest in the co. There are other suburbs, not in the royalty, but comprised, since 1832, within the parl. bor. The parish church, between the town and the river, with a handsome spire, is the most striking building in the bor. Here, also, is a free church, and chapels belonging respectively to the Associated Synod and Relief. To the N. of the town an academy was erected in 1814, at an expense of 2,250*l.*, of which the burgh contributed 1,633*l.* 4*s.* 6*d.*; the remainder being raised by public subscription. This seminary, which embraces all the branches of a learned and commercial education, has fully realised the object of its founders. There are various other schools, with several libraries, and a news-room. Eglinton Castle, famous in the sporting world for the 'tournament' held in its park in 1839, is in the immediate vicinity of the bor. According to the official returns, there belonged to the port, on the 1st of Jan. 1864, 14 sailing vessels under 50, and 23 above 50 tons, besides 1 steamer of 15 tons. Coal is the chief article of export, considerable quantities being shipped for Ireland. A considerable number of weavers work in connection with the Glasgow manufacturers, or for local consumption. Irvine was created a royal bor. by Robert Bruce, in 1308. It unites with Ayr, Campbelton, Oban, and Inverary, in returning a member to the H. of C. Registered voters, 271 in 1865. Robertson's 'Rural Recollections,' a valuable and authentic work, illustrative of the progress made by Scotland from 1765 downwards, was published at Irvine in 1829, the author being at the time factor for an estate in the neighbourhood. John Galt, author of 'Annals of the Parish,' and other works, was a native of the bor.; and Burns was for a short time engaged in business in it as a flax-dresser.

ISCHIA (an. *Ænaria*, *Inarime*, and *Pithecusa*), an isl. of the Mediterranean, belonging to Italy, prov. Naples, 8 m. SW. from the promontory of Misenum, and 18 m. WSW. Naples. It is about 7 m. in length and 20 in circ., having an area of 21 sq. m., and a pop. of 24,930, according to an enumeration of 1863. Nearly in its centre is M. San Nicolo, or Epomeo (an. *Epopeus*). This, though now an extinct, was formerly an active volcano, the eruptions of which are noticed by Strabo (lib. v.) and Pliny (lib. ii. § 88); and which burst forth with great fury in 1301, since which it has been quiescent. It is 2,513 ft. above the level of the sea, and the whole island falls in a gentle slope from it to the sea, except on the N., where its sides are more abrupt. Ischia obviously, indeed, owes its origin to volcanic agency, and consists wholly of volcanic matters. Its bold and rocky shores present an imposing appearance from the sea; and the favourable impression it makes at a distance is not dispelled on landing, it being remarkable both for fertility of soil, and beauty of situation. Besides a great quantity of wine, it produces olives and a variety of fruits, with wheat, maize, pulse, and excellent herbage. It is well supplied with game, especially partridges. Sulphur and other useful mineral products are abundant, and there are numerous hot springs and natural vapour baths, especially at its NW. extremity. The inhab. are partly husbandmen and partly sailors and fishermen. The manufacture of straw hats, baskets, and earthenware, are carried on to some extent.

Ischia is divided into two cantons: chief towns, Ischia and Foria; the former on the E. and the latter on the W. coast. Ischia, the cap. with 3,000 inhab., is a pretty town of white buildings, and the residence of a bishop. A round black rock forms a kind of haven by means of a causeway communicating with the town; its summit and sides are covered with houses, old turrets, and ruinous fortifications, huddled together, and accessible only on one side by a steep winding road. On this rock stands an old fortress, in which the last princes of the house of Aragon took refuge when Naples was conquered by the French. This building is now used as a prison. Foria is ill-built, and without a harbour.

The poets account for the volcanic phenomena of Ischia, as for those of Vesuvius and Etna, by ascribing them to the violent efforts of Typhœus and the other giants buried below them to escape from their prison:—

'Apparet procul Inarime, quæ turbine nigro
Fumantem premit Iapetum, flammasque rebelli
Ore ejectantem.' Silius Italicus, xii. lin. 147.

See also Æneid, ix. lin. 714.

Ischia was, at a remote period, colonised by the Eretrians and Chalcidians, and afterwards by Syracusans sent thither by Hiero, who, however, abandoned the island in consequence, it is said, of a violent eruption of Mount Epopeus, B.C. 470.

ISE'RE, a frontier dép. of France in the E. part of the kingdom, formerly included in the prov. of Dauphiny; between lat. 44° 44′ 30″ and 45° 53′ N., and long. 4° 46′ and 6° 22′ E., having E. Savoy, N. the dép. Ain, and W. Rhone, Loire, and Ardèche, from all which it is separated by the Rhone, SW. Drome, and SE. Hautes Alpes. Length, NW. to SE., about 95 m.; average breadth about 40 m. Area, 828,934 hectares; pop. 577,748 in 1861. This dép. is very mountainous, especially its SE. part, and its scenery is in general highly picturesque. The Alpine chains that traverse it rise in the *Col de Saysse* to an elevation of 11,017 ft. (3,358 mètres), and in the *Pic de Belladone* to 10,302 ft. (3,140 mèt.) above the level of the sea. Some of the valleys are spacious and many very fertile; that of

Digitized by Google

Graisivaudan, through which the Isère flows, is one of the richest in France. There are a few plains in the N. and W., and numerous lakes and marshes, but none of the latter is of any considerable size. Next to the Rhone, the chief river is the Isère, which gives its name to the dép. It rises in the E. part of Savoy, runs with a tortuous course, generally SW., and falls into the Rhone about 5 m. NNE. Valence, after a course of 188 m., 106 of which are navigable. Its chief affluents are the Romanche and Drac; Grenoble stands on its banks. W. winds predominate in this dép., and the annual fall of rain is estimated at nearly 35 inches. The arable lands were estimated at 316,387 hectares, meadows 66,718, vineyards 27,698, forests 168,420, and heaths 171,990 do. Agriculture is backward, but improving. About 300,000 hectolitres of corn, chiefly wheat and rye, are harvested annually, being a larger supply than produced in any of the surrounding déps. The vine is pretty generally cultivated, and the produce of wine amounts to about 450,000 hectols. a year. Chesnuts, almonds, and other fruits abound, and large quantities of ratafia and other liqueurs are made. The number of mulberry trees had increased greatly of late. Good cavalry horses and mules are bred. The breed of black cattle is generally small, but the cows are good milkers, and some superior cheese is made. The sheep yield excellent wool, and many flocks from the surrounding déps. are sent to pasture in summer in the mountains. Poultry are reared in great numbers. The number of large properties is a good deal below the average of the déps.

Isère is one of the richest déps. of France in respect of minerals, and mining is one of the chief occupations of its inhabs. Gold and silver mines were wrought till the commencement of the present century. At present iron, copper, zinc, and lead are the chief metallic products; but mercury, bismuth, antimony, and cobalt are likewise obtained; as are also coal, sulphur, alum, marble, granite, and gypsum. There are numerous large smelting furnaces, forges, and steel factories. Paper, silk stuffs, and yarn, coarse woollens, table linen, sail and packing cloth, gloves, especially at Grenoble, cotton and woollen yarn, crape, straw hats, and mineral acids are the other chief manufactures. Lyons is the great entrepôt for the produce of Isère. The dép. is divided into 4 arronds., 45 cants., and 556 com. Chief towns, Grenoble, the cap., St. Marcellin, La Tour du Pin, and Vienne. The dép. abounds with remarkable natural curiosities, and Roman and other antiquities.

ISKARDO, a commercial town of Little Thibet, on the Upper Indus, about 130 m. NW. Leh, but at present little known. It is reported to be a large fortress of irregular construction, and the cap. of a distr. of the same name.

ISLAMABAD, a town of India-beyond-the-Brahmaputra, belonging to the prov. Bengal, district Chittagong, of which it is the cap., on the river Chittagong, 8 m. from the Bay of Bengal, and 134 m. SE. Dacca. Estimated pop. 12,000, about 2,000 of whom are of Portuguese descent. 'The streets are in good order, and the bazaar abundantly supplied with every sort of domestic and foreign produce. The mode of building, and the general aspect of every thing, is decidedly Bengalee. About 300 vessels, chiefly brigs of from 40 to 100 tons, are owned in the place, and many vessels from other places resort thither. The chief exports are rice and salt. Large Maldive boats come annually, during the fine season, with cowries, tortoiseshell, cumela, cocoa-nuts, and coir for rope; and carry away rice and small manufactures. (Malcolm, i. 134.) This town is the emporium of a great extent of country, and the resort of numerous merchants. A kind of cotton canvass is made in its neighbourhood, and vessels of considerable burden are built. Islamabad has two Portuguese churches, and a large English school, established in 1818. (Malcolm's Travels in SE. Asia.)

ISMAIL, a strongly fortified town and harbour of Russia in Europe, in Bessarabia, on the N. side of the Kilian arm of the Danube, about 43 m. from the Black Sea. Pop. 27,980 in 1858. Ismail was stormed by the Russians, under Suwarrow, in 1790, by whom it was given up to an indiscriminating pillage and massacre. It has a considerable trade, exporting corn, hides, and tallow. The custom-house and quarantine are of the first class. Owing to the shallowness of the water over the bar of the Kilian mouth, vessels bound for Ismail generally enter the Danube by the Soulineh or middle mouth.

ISPAHAN (*Aspadana*), a celebrated city, formerly the cap. of Persia, 211 S. Teheran, and 263 m. SSW. Bushire. Pop. estim. at 90,000 in 1860. The city was once so extensive and populous that the Persians said of it, '*Sefaon nispe gihon*'—'Ispahan is half the world.' (Chardin, iii. 3.) Ispahan is situated in the province Irak Adjimi, of which it is the cap., as well as of a begler-beglik, of the same name. The city, which was at the height of its glory during the reign of Shah-Abbas, in the 17th century, now presents to the traveller little beyond the magnificent ruins of its former greatness. It stands in the midst of an extensive plain, abundantly watered by the Zenderood, a river about 600 ft. broad; and is surrounded by groves, avenues, and spreading orchards. 'Among the first objects that struck our eyes,' says Sir R. K. Porter, 'were the numerous noble bridges, each carrying its long level line of thickly-ranged arches to porch-like structures, some fallen into stately ruin, others nearly entire, but all exhibiting splendid memorials of the Sefi race. The S. avenue, through which we entered the town, terminated at the great bazaar of Shah-Abbas, the whole of which enormous pile is vaulted above to exclude heat, yet admit air and light. Hundreds of shops without inhabitants filled the sides of this once great emporium, the labyrinths of which we traversed for an extent of nearly 2 m., till we entered the *Maidan – Shah*, another spacious theatre of departed grandeur.' (Travels, ii. 37.) This vast oblong, formerly enriched with shops, in which every commodity of luxury and splendid manufacture was exposed, is of very large dimensions, being (according to Porter) 2,600 ft. long and 700 ft. broad, and in the centre of each of its sides stands some edifice remarkable for grandeur or character, while the remaining parts composing the square are occupied by uniform ranges of building, once used as apartments for the nobility and officers of the Persian court, the lower part being open, and forming a noble arched walk. On the NW. side is the great painted gate of the bazaar, on which, in former times, stood the celebrated clock of Ispahan, and on the opposite side is the Meshed-Shah, a superb mosque built by Shah-Abbas, and dedicated to Mehedi, one of the twelve Imāms. The centre of the NE. side is occupied by another mosque, called Looft Ullah, which faces the Ali-Kapi, a noble gate, surmounted by a dome, the marble ornaments of which still remain. Above the gate is a pavilion, pointed out as the place where Shah-Abbas was wont to sit and witness the games and exercises of his troops in the Maidan; but only a few wooden columns, pieces of glass, and decayed paintings remain to

Digitized by Google

attest its former beauty, as described by Chardin. The summit of the tower commands a view of the city in its whole extent, presenting a succession of narrow unpaved streets, ruinous houses, mosques, and shapeless structures, broken by groups of various tall trees which once made a part of the gardens attached to the houses now fallen to decay. In the S. part of the city is a large tract of pleasure ground, called the *Chahar-Bagh*, which consists of a series of eight gardens, or *paradises*, watered by canals, basins, and fountains, adorned with numerous palaces or pavilions, and enclosed within four majestic walls. In the centre of the enclosure is the palace of the *Chehal Sitoon*, or forty pillars, the favourite residence of the later kings of the Sefi dynasty. Its front, which is entirely open to the garden, is sustained by a double range of columns, each shooting up from the united backs of four lions of white marble; and within are several large apartments on which all the caprice and cost of eastern magnificence have been lavished. The walls of the saloon, in particular, are embellished with large paintings, which, without exhibiting much taste or correctness of design, are still useful as illustrations of the manners and habits of the Persians. The suburb of Julfa, which is situated S. of the Zenderood, and connected with the Chahar-Bagh by a bridge 1,000 ft. long, having 34 arches, was originally founded for a body of Armenians, whom Shah-Abbas transplanted from their own country (Julfa on the Araxes), and stationed here, with full toleration of their religion, and many valuable mercantile privileges. They were known all over the E. for their manufacturing industry; and their quarter, which was inhabited exclusively by Christians, formerly comprised 13 churches, and some of the handsomest private residences and gardens in the city, the pop. of this industrious quarter alone having exceeded 30,000 at the close of the 17th century. At present, however, it is little more than a mass of ruins, the few remaining houses being tenanted by a population, whose moral condition, according to Sir R. K. Porter, has suffered a deterioration corresponding to the decline of their fortunes. The suburb of Abbas-abad, which lie W. of the city, and that of the Guebers, or fire-worshippers, on the S. side, near Julfa, are entirely destroyed.

Ispahan has, within the last 50 years, begun to revive from its desolation; and the spontaneous efforts of the inhabs., in trying to better their condition, were ably seconded by the exertions of Hadji Mahommed Hussein Khan, the *Ameen-a-doolah*, or second minister of the shah, who employed his immense wealth and influence in the improvement of his native city. A new palace, near the *Shetel Sitoon*, has been completed, and extensive repairs have been made in the bazaars, streets, and fountains; besides which, a large tract of land, close to the river, has been enclosed to form rice plantations, the produce of which now forms an important article of commerce. The manufacture of all kinds of woven fabrics, from the most costly gold brocade of figured velvet to the most ordinary calico or coarse cotton, is pursued on an extended scale; partly on raw materials raised in the surrounding district, and partly also on silk and cotton wool introduced from Ghilan and other provinces of Persia; many hands are also employed in making gold and silver trinkets, paper and paper boxes, pencases, ornamented book covers, fire-arms, sword-blades (of steel, from India), glass, and earthenware. These goods are sent to all parts of the E., Ispahan being the chief emporium in Persia, and on the great line of communication between India, Caubul, and China, on the E., and Turkey, Egypt, and the Mediterranean, on the W. Its trading prosperity, however, like that of Bushire, is much obstructed by the monopolies and injudicious taxes of the government. The inhabs. of Ispahan are considered the best manufacturers in Persia, and education seems to be very general. Every one above the lowest order can read and write; and artisans and shopkeepers are familiar with the works of their favourite poets. The merchants form a distinct class: frugal, and even penurious in their habits, they seldom make any display of wealth, and are extremely wary and circumspect in their commercial speculations, owing, no doubt, to the severity of their sufferings during national disturbances, when they have been usually selected as the first victims of plunder and oppression. Their houses are mean on the outside, with low, narrow entrances, but are often fitted up internally with great luxury. These merchants, with all their affectation of poverty, have capitals embarked in trade which vary from 80,000 to 150,000 tomans, and not only control in a great degree the whole trade of Persia, but are able also, it is said, to influence prices in the markets of W. Hindostan. Owing to insecurity and bad government, the interest of money in Ispahan varies from 12 to 36 per cent. a year; and the farming pop. are often compelled to pay 60 per cent. for the loans required to enable them to meet the exactions of the government.

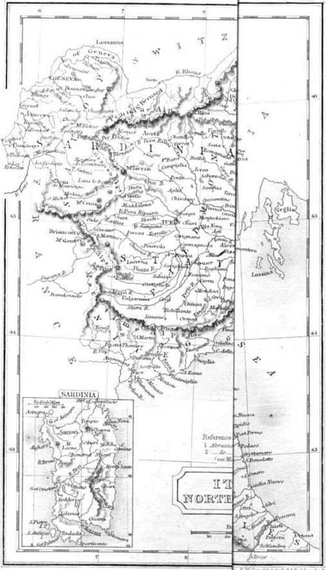
The origin of Ispahan is uncertain; but its position seems to identify it with the *Aspadana* of Ptolemy. Under the caliphs of Bagdad it became the cap. of Irak, and rapidly increased in wealth, pop., and trade. This rising prosperity, however, received a severe check during the invasion of Timour, who took the city, in 1387, and gave it up to military execution. The troops massacred 70,000 of the inhabs., whose heads, piled on the walls of Ispahan, long attested the merciless severity of the conqueror. From this desolation the city gradually revived under the Sefis; but it did not become the residence of royalty till Shah-Abbas the Great made it the metropolis of Persia, embellished it with stately mansions, and rendered it not only a luxurious capital, but filled it with merchants, artificers, and agriculturists from Europe as well as Asia, whose united industry soon made it the great emporium of the Asiatic world. The city was at this time 24 m. in circuit, and is stated to have comprised 160 mosques, 48 colleges, 1,800 caravanserais, 273 public baths, and 12 cemeteries; while the pop. is said to have amounted to 600,000 persons. The shah's court, at this time, was the resort of ambassadors from the proudest kingdoms of the east, as well as of Europe. This prosperity, however, was but of short duration; for, in 1722, Persia was invaded by the Affghans, and Ispahan, after sustaining a siege of eight months, during which the adjacent country was laid waste by the barbarous policy of the enemy, was reduced to its present ruinous state: the walls were so completely destroyed that all traces of them are obliterated, the palaces dismantled and robbed of all their ornaments, and the people massacred without mercy. Nadir-Shah recaptured the city in 1727, but he took no steps to restore its ancient glory. The sovereigns have resided at Teheran during the last hundred years, and Ispahan has gradually fallen to a state of decay, from which even its commercial importance has not been able to preserve it.

ISSOIRE, a town of France, dép. Puy-de-Dôme, cap. arrond. on the Creuze, 19 m. SSE. Clermont. Pop. 6,159 in 1861. The town is well built and clean; in its centre is a spacious market-place.

Digitized by Google

Italy Mainland : Area 93,612 Sq Miles Breadth 150 Miles

England & Wales Area nearly 58,000 Sq Miles Length 365 Miles Breadth 270 Miles



E. Weller, del et sculp 34 Red Lion Sq

Digitized by Google

It has manufactures of copper kettles and other copper wares, with some trade in walnut oil, hemp, and wine.

ISSOUDUN, a town of France, dép. Indre, of which it is the most important, though not nominally the chief, town, cap. arrond., on the Theols, which is here crossed by three bridges, 16 m. NE. Châteauroux, on the railway from Paris to Toulouse. Pop. 14,282 in 1861. The town stands partly on the declivity of a hill, and partly in the plain at its foot; is said to be better laid out and built than any other town in the centre of France; and is remarkably clean. It owes its regularity and beauty principally to the numerous devastating fires it has undergone at different times, during one of which, in 1651, the citizens repulsed and put to flight the troops of Louis XIV., then investing the place. Issoudun was formerly a fortress of some strength, and possessed a large castle, a portion of which, now remaining, serves as a prison. The town has 4 churches, 2 hospitals, a new town-hall, barracks, a small theatre, and several public walks. It is the seat of a sub-prefecture, of a tribunal of original jurisdiction and commerce, and of a chamber of manufactures. It has linen and woollen cloth and parchment factories, and was formerly a place of considerable commercial activity; but it has not yet recovered the injury done to its industry by the revocation of the edict of Nantes. Issoudun is of great antiquity, having been one of the towns laid waste by the Bituriges to arrest the progress of Julius Cæsar.

ISTRIA. See ILLYRIA.

ITALY (Lat. *Italia*, Fr. *Italie*), one of the most celebrated and fertile countries of Europe, the seat of the greatest empire of antiquity, and of art, science, and civilisation, when the surrounding countries were immersed in barbarism. It is finely situated, comprising the whole of the central peninsula of S. Europe, with the extensive and rich country to the N. of the peninsula, and included between the Alps and the Mediterranean. It extends between lat. 36° 46′ and 46° 30′ N., and long. 6° 30′ and 18° 30′ E., having to the NW. France, N. Switzerland and the Tyrol, NE. Carinthia, Carniola, and the Hungarian Littorale, E. the Adriatic, and on all other sides the Mediterranean. In antiquity, it was known by the names of *Hesperia*, *Ausonia*, *Saturnia*, *Œnotria*, &c.; but these names, though loosely applied to the whole country, were strictly applicable only to particular portions of its surface. Various derivations have been assigned to the term Italy. The name is said to have designated originally only its more S. portion; but in the course of time it superseded every other term, and was gradually extended to the whole country from the Alps southward.

In shape, Italy has been familiarly likened to a boot, the heel formed by the Terra d'Otranto, and the foot by Calabria. The general direction of the Italian peninsula is SE. and NW.; its length, from Mount St. Gothard to Cape Spartivento, in Calabria, is nearly 750 English m.; its breadth varies from about 380 m. in N. Italy, to less than 80 m. near its centre; and in one part of Calabria it is no more than 18 m. from sea to sea. The area of the mainland may be estimated at about 100,000 sq. m.; but two large islands, Sicily and Sardinia, and many smaller, as Elba, Ischia, the Lipari group, and others, belong to Italy. The kingdom of Italy, according to an enumeration made in the spring of 1864, has a population of 21,777,334 souls, dwelling on an area of 98,784 English square miles. The extent and population of the ancient political divisions of which the monarchy is composed, is shown in the following table:—

Provinces	English sq. miles	Population
Continental Sardinian States	15,373	3,780,967
Island of Sardinia	9,547	573,115
Lombardy	7,765	2,764,912
Emilia	8,821	2,117,732
Umbria and the Marches	5,997	1,393,824
Tuscany	9,150	1,812,253
Neapolitan States	31,621	7,629,273
Island of Sicily	10,510	2,302,168
Total	98,784	21,777,334

Added to this must be the territory still (1865) belonging to the pope, containing an area of 4,891 sq. m., with 692,106 inhabitants, and Austrian Italy, comprising 8,720 sq. m., with a pop. of 2,446,056. This brings the total area of Italy to 112,395 sq. m., with 24,915,496 inhabitants.

The kingdom proper is divided into 193 'circondarii,' or administrative circuits, subdivided into 1,597 'mandamenti,' or districts, embracing about 8,000 parishes.

The population is most crowded in the south of the Sardinian states; it is least dense in the island of Sardinia and in the Marches. Italy contains on an average 220 inhabitants to the square mile—a figure higher than that of France and Germany, but lower than that of England, the Netherlands, and Belgium.

Physical Geography.—The frontier of Italy is extremely well defined. She is defended on the N., the NE., and NW. by the vast bulwark of the Alps, the passes of which might be easily guarded and made impervious to hostile attack. She has everywhere else a sea frontier; so that, while she is protected by a natural rampart against attacks by land, she has every facility, by means of her extensive sea frontier and numerous ports, for internal and foreign commerce.

Though bounded by the Alps, only a comparatively small portion of the surface of Italy is covered with Alpine ramifications. The mountain system exclusively belonging to the peninsula is that of the Apennines. These mountains, which may be regarded as a continuation of the maritime Alps, at first run E. along the Mediterranean shores in the former Sardinian territory; and then, turning gradually S., pass through the peninsula nearly in its centre, and sending off numerous branches on either side. At length, near lat. 40° 45′, the main ridge divides into two separate chains, the principal of which continues S. to the extremity of Calabria, while the other runs ESE. through the Terra d'Otranto. The mean elevation of the Apennines is about 4,000 ft.; Monte Corno, the summit of the Gran' Sasso d'Italia, in Abruzzo Ultra, is, however, 9,521 ft. in height, and is capped with snow during the whole year; Monte Velino is 8,182 ft.; and Monte Sibilla, 7,212 ft. high; and many other summits in Central and extreme S. Italy approach the latter in elevation. The Apennines are much less rugged than the Alps, and abound with rich forests and pasture land, on which numerous flocks of sheep are fed. They are of great service to the country, by the numerous rivers which have their sources in them, and by their influence in moderating the summer heats. Italy is also famous for its volcanoes; those of Etna, Vesuvius, and Stromboli, in the Lipari Islands, being, if not the greatest, by far the most celebrated and best known of any on the globe.

But though for the most part mountainous, Italy has some plains of great extent and extraordinary

Digitized by Google

fertility. Of these, the most extensive and richest is that of Lombardy, or of the Po. This noble plain extends from the foot of the Alps, near Susa, to the mouths of the Po, in the Adriatic, a distance of about 250 m., with a breadth varying from 50 to 120 m., including nearly the whole of what was formerly known as the Lombardo-Venetian kingdom, and the northern part of Umbria and the Marches. This great plain is extremely well watered; the numerous rivers and streams that rise in the Alps, and pour down into the plain, afford a vast and inexhaustible supply of water; and from these an infinite number of canals have been cut, that diffuse the fertilising element over the whole country, and give to its corn and rice fields and its variegated meadows, extraordinary productiveness. The soil, though different in the various parts, is for the most part loamy and very fertile. The surface is generally divided into small farms of from 10 to 60 acres; and if not scientifically, is at least carefully and economically, cultivated. The fields are enclosed by lines of fruit-trees, mulberry-trees, poplars, and oaks; and their growth is so luxuriant, that in many parts the country has the appearance of a vast forest. This plain has to boast of an immense number of cities, many of which are of great antiquity and considerable size, and all of them adorned with noble buildings and valuable works of art. Probably, on the whole, the plain of Lombardy may be called the garden of Europe; and, at all events, it is certainly the garden of Italy.

The next great plain stretches along the W. shore of Central Italy for about 200 m., from Pisa, down to Terracina, in the former Neapolitan states. Within these limits are included the Tuscan *maremme*, great part of the *campagna* of Rome, and the *Pontine marshes* (anc. *Pomptinæ paludes*). This plain is, in all respects, very different from the former. Though in antiquity, and to a certain extent, also, in the middle ages, it was celebrated for its fertility, and was highly cultivated and populous, it is now comparatively a desert. This is a consequence of the prevalence of *malaria*, which infests these districts to such an extent as to render them at certain periods of the year all but uninhabitable. They are necessarily, therefore, for the most part in pasture; and are occupied by a vagrant population, who reside in the country only in the healthy season. In the campagna of Rome the shepherds who have charge of the flocks are obliged, during the summer season, to repair every night to the city, or to some other town, as sleeping in the country would be fatal; it is then, also, extremely dangerous to travel by night through the Pontine marshes. The vagrant population of this extensive tract, and those who live on its borders, have all an emaciated, unhealthy, cadaverous aspect; and where the plain is cultivated, the labourers who come from other parts of the country to assist in the harvest frequently fall victims to the pernicious influence of the atmosphere, or have their constitutions injured for life. In the Tuscan maremme, the soil has in many places become, from neglect, sterile and unproductive; but, in the campagna of Rome and the Pontine marshes, the soil is, in most parts, extraordinarily fertile, is covered with a luxuriant vegetation, and, were it properly cultivated, would yield immense crops.

There are no hills in the Campagna. Its undulations do not arise from elevations of the surface, but from depressions; it may be described as a *plateau* from 1 to 200 ft. above the level of the sea, traversed by wide and shallow valleys, which occupy one-fourth or one-fifth part of its surface. Some of these valleys are dry, others have small sluggish streams, and they are from 50 to 150 ft. deep. There is a strip of swamp along the seacoast, probably 2 or 3 m. broad; but with this exception, the Campagna di Roma seems to be generally dry; for the wet lands seen in some of its small valleys are such as we find in every country, and are not worth mentioning as an exception. Its present appearance is bleak and deserted in a remarkable degree. There are scattered clumps of brushwood; but the eye ranges over it for miles often without discovering a single timber tree, and there is nothing deserving the name of woodland or forest within its vast bounds. Fences are rare, except near Rome; a gentleman's country house, or villa, is not to be seen in it, nor a decent farm-house; and even the cottages are few and far between. The whole district is divided into immense estates, usually let in small lots, on the *métayer* system, and is kept mostly in pasture, not more than one-eighth or one-tenth part being under the plough or rather *hoe*, for it is laboured with the latter.

The Pontine marshes are 24 m. long, and probably 12 broad. The work of draining was commenced under the Roman republic, was continued by the emperors and popes, and is not yet entirely finished. The journey through them is most monotonous. A canal 50 ft. broad, the grand trunk of the drainage, extends along the whole length, in a line mathematically straight. The soil thrown out of this canal forms a raised bank, 5 or 6 ft. above the water, and 80 or 100 ft. broad. An excellent road passes along this bank, with a double row of lofty trees on each side It was upon this canal that Horace travelled in a trackboat, on his journey to Brundisium. The marshes are not altogether uninhabited. A few houses are met with on the road, and others are seen in the distance. The surface is chiefly in pasture; but part is planted with tall reeds used for vine props, part covered with brushwood, probably raised for fuel, and some small patches are ploughed. Very little wet marsh is now visible till the north or higher end, where there is a considerable tract still undrained. The general surface of the plain inclines eastward and southward, so that the inland part is actually lower than that towards the coast on the north; and, like the Neapolitan Campania, the level ground abuts sharply against the mountains.

Various and very conflicting causes have been assigned for the increase of *malaria*, and the consequent depopulation of these extensive and once fertile territories. They were always, indeed, rather unhealthy; but their unhealthiness has been prodigiously aggravated in modern times. It is believed by many that its deterioration has been, in a considerable degree, owing to the wanton destruction of the woods and forests, by which the land was shaded in antiquity, and screened from the fiery beams of the summer sun. No doubt it is in part also a consequence of the obstructions that have been allowed to grow up in the courses and at the mouths of rivers, by which their waters have been formed into stagnant and noxious marshes. But the last-mentioned circumstance may itself be ascribed to what has had by far the greatest influence, that is, to the decay of pop. and industry, occasioned by the irruptions of the barbarians, the ravages of war, and the influence of epidemics. The ill success that attended the efforts of the late Tuscan government to reclaim some portions of the maremme, by establishing colonies in them, appears to have led many to believe that they were absolutely irreclaimable. However, this is not the case. The great works, principally of a hydraulic character, that have of

Digitized by Google

late years been undertaken and carried into effect in Italy, by which large tracts of the maremme have been converted into productive estates, show what may be done by judicious efforts on a large scale. Hitherto, indeed, the land that has been reclaimed and made tolerably healthy, bears but a small proportion to what is still abandoned.

The third great plain of Italy is that of Capitanata (Apulia), having Foggia in its centre. It comprises the greater portion of a tract of flat country, extending from the border of Samnium to Otranto, along the shore of the Adriatic, anciently included in Daunia, Japygia, Peucetia, and Messapia. The lower part of the Apulian plain is arid, the rivers decreasing both in size and frequency as we proceed farther S.; and in the provinces of Otranto and Bari the rain water is obliged to be carefully preserved in cisterns for the irrigation of the land. The upper portion of the plain is more plentifully supplied with water, but it also has, in many parts, a sandy and thirsty soil. A great part of it is destitute of bush, house, or tree; it is farmed in large estates, and round about Lucera and elsewhere there is a good deal of arable land; but by far the greater portion of the surface consists of pastures, called *tavoliere*, into which immense flocks of sheep from the Abruzzi are driven to feed in the winter.

The level district round Naples is still well entitled to its ancient epithet of *Campania Felix*, being at once rich, well cultivated, and densely peopled. The *Campania* is a tract of *carse* land, 40 m. in length, by 15 or 20 in breadth, presenting a dead level like the surface of the ocean, and probably from 1 to 100 ft. above it. In the midst of this vast area, there are two large islands; Vesuvius and its dependant hillocks constitute one of a round form, and about 8 m. in diameter; a chain of hillocks, narrow ridges, and truncated cones, extending from Naples to Cape Misenum, covering a space of 12 m. in length, and 3 or 4 in breadth, constitutes the other. With the exception of these two elevated tracts, the whole district is a dead level. It is, in fact, a portion of the bottom of the ocean lifted up by subterranean agents, and converted into dry land. As might be expected, it does not rise by a series of small elevations to the outer hills of the Apennines; it abuts sharply against them, as the waters of the German Ocean abut against the last level of the Lammermuir hills. The *Campania Felix* is probably equal in fertility to any spot in the world. Though so level, it is remarkably dry, and hence free of malaria. The vegetable soil, which is exposed in drains at some places, is of great depth, and cultivated like a garden. It is put to what may be called a double use, first ploughed and sown with corn and then, at every interval of 50 or 100 ft. there is a row of vines.

Rivers and Lakes.—Few countries are better watered than Italy, whether in regard to springs, rivers, or lakes. The principal river is the Po, the *Eridanus* or *Padus* of the ancients; it issues from Mount Viso in the Alps, on the confines of France, and receives, during its long course to the Adriatic, a vast number of tributary streams. It divides the great plain of Lombardy into two nearly equal parts, and is the grand receptacle for the streams flowing S. from the Alps, and for the lesser waters that flow N. from a part of the Alpine range.

'Fired with a thousand raptures, I survey
Eridanus through flowery meadows stray,
The king of floods! that, rolling o'er the plains,
The towering Alps of half their moisture drains,
And proudly swoln with a whole winter's snows,
Distributes wealth and plenty where he goes.'

Of its numerous affluents, the most important are the Baltea, Sesa, Tessino, Adda, Chiesa, and Mincio, from the N.; and the Tanaro, Bormida, Trebia, famous for the great victory gained by Hannibal on its banks, and Panaro, on the S. The other large rivers of the N. of Italy, are the Adige, Brenta, Piave, and Tagliamento, all flowing S. from the Alps. In Central and Southern Italy no great river can be expected to arise, on account of the narrowness of the peninsula, and the central position of the Apennines, in which they have their sources. The Tiber is the principal, and also the most celebrated; but, like the other rivers of this part of Italy, it is interesting chiefly from its ancient renown, and the classical recollections associated with its name, than from its magnitude or intrinsic importance. Among others of this class are the Arno and Ombrone in Tuscany. Considerable differences of opinion have taken place as to the identity of the Rubicon, the SE. boundary of Cisalpine Gaul, so famous in ancient history. It is generally, however, believed to be represented by the Fiumicino, which falls into the Adriatic 18 or 20 m. below Ravenna. An ancient law of the senate and people of Rome made it death to cross this river with arms in a hostile intention. Its passage, by Cæsar, has been finely described by Lucan (lib. i. lin. 183–227); and his exclamation on that occasion, '*jacta est alea*,' has passed into a proverb. In the former Neapolitan states, the only streams deserving the name of rivers are the Volturno, the Garigliano, anciently the *Liris*, and the Ofanto, formerly the Aufidus, which, flowing past Cannæ, is thence called *sanguineus* by Silius Italicus (lib. x. 320). The rivers which descend from the Apennines are apt, like other mountain currents, to swell suddenly, and to cause inundations in the level parts of the country, particularly towards the mouth of the Po.

'Proluit insano contorquens vertice silvas
Fluviorum rex Eridanus, camposque per omnes
Cum stabulis armenta tulit.'

Georg. i. 481.

To restrain this, dykes or mounds have been erected in many places; and as the earthy substances brought down by the flood have, in many cases, raised the bed of the stream, and required fresh embankments, the mounds are often of considerable height, and have the appearance of aqueducts.

The most considerable of the Italian lakes are situated in the N.; including those of Garda, Maggiore, Como, and Lugano. In Central Italy are the lakes of Perugia (an. *Lacus Thrasimenus*), Bolsena, Bracciano, Celano or Fucino, and Albano; and in the S. those of Averno and others, which, though insignificant in point of size, have acquired imperishable renown. Many considerable salt lagoons line the Mediterranean coast in various parts of Tuscany and the Marches, and the shores of the Adriatic in the Venetian territories, and round the promontory of Gargano. Besides the Pontine marshes, there are numerous marshy tracts of less extent in the Val di Chiana and other parts of Tuscany, in the plain of Salerno, and along the banks of the Po, especially in the region round its mouth. S. of the last-mentioned tract, a considerable extent of bog-land, called the *Val di Commachio*, occupies a large portion of the papal legation of Ferrara. Italy has about 3,000 m. of sea-coast. Its chief capes and headlands are Argentaro, Circello, Campanella, Spartivento, and Santa Maria di Leuca, on the Mediterranean, and the Testa di Gargano and Cape Promontoire (Istria), on the Adriatic. Of the gulfs or bays formed along its coasts, the principal are the Gulf of Taranto on the SE., between Apulia and Ca-

Digitized by Google

labria; those of Genoa, Gaeta, Naples, Salerno, Policastro, Eufemia, and Gioja, on its W.; and those of Squillace, Manfredonia, and Trieste, on its E. shores.

Geology and Minerals.—Italy may be described as 'a calcareous region enclosing a schistous band;' but volcanic action has been so prevalent, that the strata are often found extremely disarranged from their original position. N. of Genoa, the primary formations in the Apennines include granite, gneiss, serpentine, quartz, and clay-slate, often intermixed with transition limestone and grauwacké. Granite and gneiss are absent in the Apennine region of Central Italy, but they reappear in the S., where they predominate among the primary formations, from the Abruzzi to the furthest end of Calabria. They also exhibit themselves in the *maremme*, near the surface; the secondary formations in Tuscany being often intermixed with primary rocks, and in some instances overlain by them. The tertiary deposits of Italy are very extensive, and form the sub-Apennine region, or low hill ranges, extending along the flanks of the Apennines throughout the whole peninsula, consisting of sandstone, marl, and coarse limestone. These formations contain an abundance of marine shells, among which as many as 770 different species have been enumerated, half of them still inhabiting the adjacent seas. The alluvial plain of the Po abounds in fossil remains of mammalia, birds, and amphibia, and similar fossils have been discovered in the Neapolitan states. Several regions in the central and S. parts of Italy are almost wholly composed of volcanic products. Such are the Campagna di Roma, which abounds with a volcanic tufa, called *travertius*, of which great part of Rome is built; and the neighbourhood of Vesuvius, which is covered with lava and *scoriæ*. Numerous traces of extinct volcanoes exist, the craters of which have been converted into lakes.

Italy is less rich in metals than in most other things; it, however, is well supplied with iron; it has also copper and lead ore, and the precious metals have been found, but in inconsiderable quantities. The centre is the chief seat of mining industry, and large quantities of iron are furnished by the island of Elba. The most valuable mineral product of continental Italy is, however, the fine statuary marble of Carrara. Marble of a similar kind, and nearly as good, is found at Seravezza, and other kinds are met with in almost every part of the peninsula. Great quantities of borax are found in Tuscany: sulphur, building stone, salt, nitre, alum, alabaster, and crystal are the other chief mineral products; and the Apennines abound in basalt, dried lava, *pozzolana* sand, and other volcanic substances. Caverns of stalactites are met with in many parts, and mineral springs and vapours are of very frequent occurrence. (Hoffmann, Europa; Lyell's Geology.)

The *climate* of Italy is delightful. Owing to its length from N. to S., and the great difference in the elevation of its surface, there is necessarily a considerable variation in the temperature of different parts; but, speaking generally, the air is throughout mild and genial; the excessive heats of summer are moderated by the influence of the mountains and the surrounding sea, and the cold of winter is hardly ever extreme. As respects temperature, it may be divided into four regions: the first, extending N. of the Apennines, and of lat. 43° 30′, and including the plain of Lombardy, has a climate somewhat similar to that of S. Germany, but warmer. In winter, the lakes of Garda and Maggiore, and the lagoons of Venice, are partially frozen; snow often falls, and the thermometer sometimes sinks to 14°; even in summer, the N. wind is cold, and oranges, lemons, and other *agrumi* do not flourish in the open air. The second region, extending between lat. 43° 30′ and 41° 30′, includes the greater part of Tuscany, Umbria, and the Marches, with the N. part of the Neapolitan states. Within this band, snow and ice are mostly confined to the mountain tops, and olives and *agrumi* of all kinds flourish luxuriantly without culture. The third region, from 41° 30′ to 39°, comprises the middle Neapolitan provs. Snow is here very rare, and the finest fruits are found in the valleys throughout the winter. The fourth region embraces the S. part of Calabria, with Sicily and the Lipari Islands. Here the thermometer never falls to the freezing point, and the sugar-cane, Indian fig, papyrus palm, and other tropical plants are abundant on the low lands.

The following is a table of the medium temperature of the year in different latitudes of Italy:—

Places	Lat. N.	Height above Sea	Mean Annual Temperature
Milan . .	45° 28′	492 feet.	53·6° Fahr.
Bologna .	44 30	255 „	55·44 „
Florence .	43 46	230 „	59·4 „
Rome . .	41 53	187 „	60·0 „
Naples. .	40 50	—	62·2 „

Throughout most parts of Italy there are but three seasons in the year: a spring, which more than realises all that poets have said in its praise; a hot summer, and a short, and not severe, winter: most of the vegetable products, even in the N., flower by the end of March. Heavy rains prevail during Oct. and Nov.; W. and NW. winds are the most prevalent; but the *libeccio* and *sirocco*, the *simoom* of the Arabs, also occasionally occur, and exert an oppressive, and in the S. an injurious, influence over the animal frame.

Notwithstanding the mildness and general salubrity of the Italian climate, large districts of the country are very unhealthy, and the chances of longevity are less than in England and other countries under more inclement skies. But the unhealthiness is not the effect of climate, but of circumstances connected with the physical geography of the country, and the want of industry. Nor is the lesser longevity of the Italians to be ascribed to their climate, but to the depressed situation and poverty of the bulk of the people; the bad quality and scanty supply of food and clothes; the low state of medical science; and the want of cleanliness. The genial climate may, indeed, be said to contribute indirectly to bring about these results, by encouraging slothful habits, and making the people less industrious than they would be were it more severe.

It has been supposed that the climate of Italy has undergone a considerable change, and that it is now less cold in winter than formerly. There seem to be good grounds for concurring in this opinion; and the change may be accounted for by the cutting down of the forests already alluded to, and by the changes that have taken place in the countries to the N. of Italy. (See Hume's Essay on the Populousness of Ancient Nations, and the authorities referred to in it.) It is to be doubted, however, whether there be any foundation for the notion, that either the productiveness of Italy or its pop. has diminished. Some extensive tracts, as the Tuscan *maremme*, the Campagna, and some parts of the former Neapolitan provinces, which in antiquity were occupied by a dense pop., are now all but uninhabited; but, on the other hand, Lombardy has been signally improved, and is at this moment infinitely better cultivated and more populous than at any former period. On the whole,

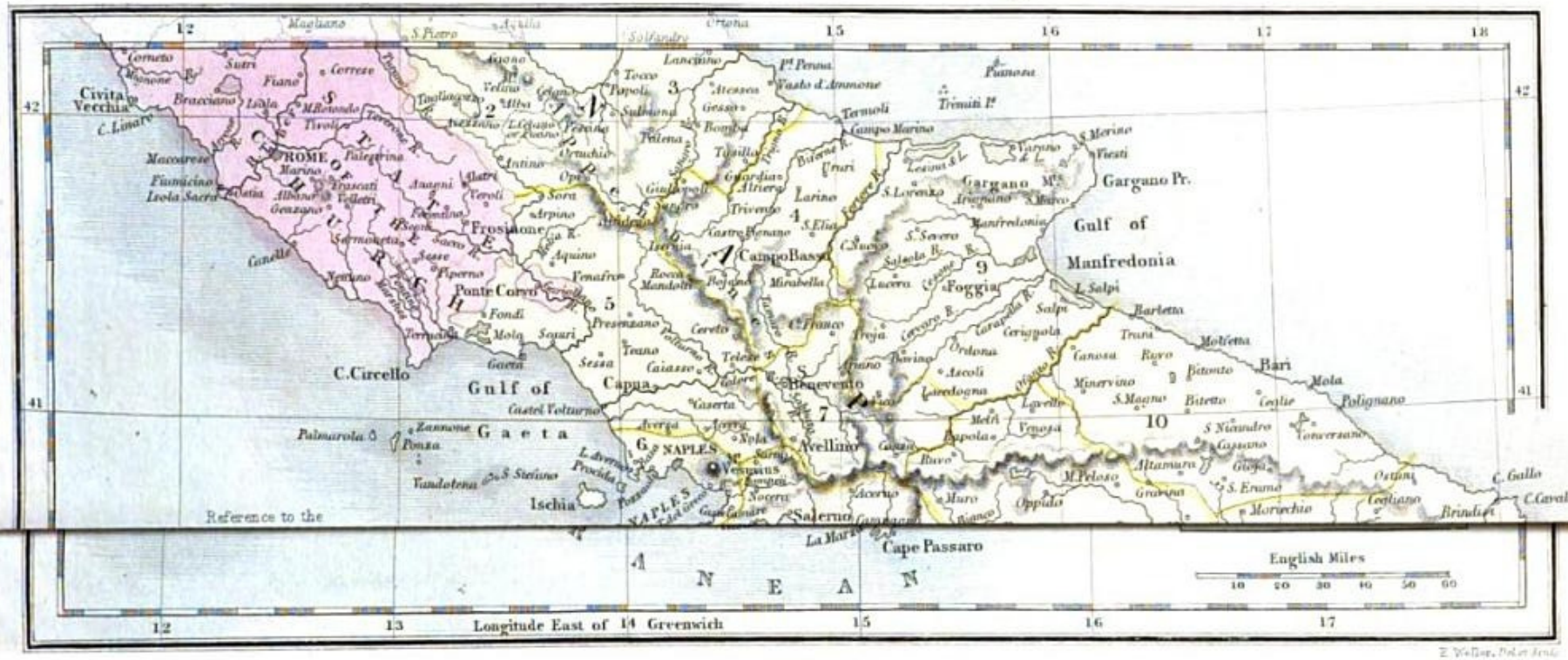
Digitized by Google

Sicily Area 27,368 Sq. Miles Length 150 Miles

Sicily Breadth 60 Miles

England & Wales Area nearly 58,000 Sq. Miles Length 365 Miles

England & Wales Breadth 250 Miles



London, Longman & Co.

Digitized by Google

it is probable, that whatever Italy may have lost in respect of pop. in certain districts, has been fully countervailed by a corresponding gain elsewhere; and that her decline from her ancient fame and influence has not been occasioned by any decline in the number of her sons.

General Aspect of Italy.—Speaking generally, nothing can surpass the beauty and diversity of the scenery of Italy. Its mountains have every variety of form and elevation: alternately smooth and rugged, they exhibit by turns gentle declivities and fine pastures, tremendous precipices and chasms, water-falls, deep and majestic forests, and summits, sometimes capped with snow, and sometimes emitting smoke and flames. Many of the valleys, as that of the Arno, are delightful beyond description; the plain of Lombardy is not less beautiful than rich, and even the half-desert tracts along the W. shore interest by their solitude and their vastness. The extent of the sea coast, and the number and magnitude of the lakes, add also greatly to the beauty and variety of the landscape; while the clearness of the atmosphere gives to every object a brightness of colouring, and distinctness of outline, that can with difficulty be conceived by those accustomed to our cloudy and less brilliant skies. No wonder, then, that the beauty and richness, as well as the glory of their country, should have been a favourite theme of the ancient writers:—

'Sed neque Medorum silvæ, ditissima terra,
Nec pulcher Ganges atque auro turbidus Hermus
Laudibus Italiæ certent; non Bactra, neque Indi
Totaque thuriferis Panchaïa pinguis arenis.
. . . . . .
Sed gravidæ fruges et Bacchi Massicus humor
Implevêre; tenent oleæ armentaque læta.
. . . . . .
Hic ver assiduum atque alienis mensibus æstas;
. . . . . .
Adde tot egregias urbes, operumque laborem,
Tot congesta manu præruptis oppida saxis,
Fluminaque antiquos subter labentia muros.
. . . . . .
Salve, magna parens frugum, Saturnia tellus,
Magna virûm.'—Georg. ii. 136, 143, 149, 155, 173.

In respect of its *vegetable products*, Italy may be divided into six regions, according to its elevation. These are as follow:—

Regions	Elevation	Products
1. Of the plains	— to 1,200 ft.	Lentisk, myrtle, laurel, ilex and cork trees, citron, fig, olive, vine, and pomegranate.
2. Oak and chesnut	1,200 — 3,000 —	Oak, chesnut, beech, olive, vine, and corn.
3. Beech and fir	3,000 — 5,000 —	Beech, firs, larch, juniper, and wheat, barley, oats, and maize, to 4,000 ft.
4. Sub-Alpine region	5,000 — 6,000 —	Dwarf pine, arbutus, gentian, anemone.
5. Upper Alpine region	6,000 — 8,500 —	Androsaceæ, saxifrage, and other Alpine plants.
6. Region of snow	8,500 ft. and upwards	Iceland moss, *Artemisia mutellina*, and a few other plants.

There is a much greater diversity of plants in the S. portion of the Apennine chain than in any other part of its extent: this diversity is the most marked in the second, or oak and chesnut region. The Italian or S. declivities of the Alps present a greater diversity of vegetation than those facing the N.; and more species of plants are found on them than on the Apennines. On the Alpine summits are seen the dwarf birch, juniper, and other plants of Lapland and Siberia, while at their feet flourish the fig, *Agave americana*, and *Cactus opuntia*. Mt. Vesuvius has a Flora peculiar to itself.

Italy is much more an agricultural than a manufacturing country; but the indolence of a great part of the pop., and the backward state of agriculture, render the actual return far inferior to what the country is calculated to yield. Silk has become a most important product, and its culture has increased very rapidly within the last half a century. Wine and olives, particularly the latter, are also very important products; and there is a great abundance of the finest fruits. Corn is not so generally cultivated in Italy as in the more N. countries of Europe; but pulse and other vegetables are extensively raised. Particular parts of the country are appropriated to particular products. Lombardy is the chief corn country; in the Genoese and Tuscan territories, the culture of fruit, particularly of olives, predominates; while the unhealthy district of the Maremme and Campagna remains, as before stated, chiefly in a state of natural pasture. Skilful agriculture is principally confined to the N.; in the centre, with the exception of portions of Tuscany, and S., it is at a very low ebb; and in the former Neapolitan states the abundance of vegetable productions is owing more to the climate and soil than to the industry of the husbandman. The products of the N. parts of the peninsula are found there in abundance; and whole groves of olives are seen growing in the open country, interspersed with spices and other tropical products.

The pastures of Italy are stocked with large herds of black cattle, sheep, and goats: few horses are reared; and the breed is in little estimation, except in certain parts of the Neapolitan territory. Mules are more common, being found better adapted for the bad and mountainous roads. The operations of agriculture are performed by oxen. The buffalo is found in Italy, though hardly any where else in Europe. Hogs are fed in large herds in the forests, particularly in Calabria. The mountains and forests contain a number of wild animals; among others, the boar, stag, marmot, and badger. The lynx or tiger-cat is not uncommon in the mountains of Abruzzo; and the crested porcupine is supposed to be peculiar to the S. of Italy. Foxes, hares, and winged game are sufficiently abundant. From the heat of the climate in the S. provs., snakes and reptiles of different kinds are numerous. The rivers, lakes, and coasts abound with fish.

Manufactures and Trade.—Italy is not distinguished for manufactures: the chief are those of silk fabrics and silk thread, which have their principal seat in Lombardy. Woollen and linen stuffs, straw plait, gauze, artificial flowers, straw hats, paper, parchment, leather, gloves, essences, and musical instruments are among the other goods manufactured in Italy; but, generally speaking, the raw products of the country form its chief exports, and most manufactured articles, whether of necessity or luxury, are imported from foreign nations. Venice and Genoa engrossed a large proportion of the trade of Europe, till the discovery of the passage to the East, by the Cape of Good Hope, and the enterprise of the Portuguese and Dutch, and after them the French and English, diverted European commerce into a new channel. From that period, the prosperity of those cities gradually decayed, and the first of them has sunk into comparative insignificance, while Italy at large has but a small portion only of her former commercial importance. The subjoined table shows the quantities of the principal articles imported

Digitized by Google

into the kingdom of Italy, in each of the years 1862 and 1863:—

		1862	1863
Wine	litres	16,341,855	18,579,303
Spirits	,,	10,971,081	13,889,830
Oil: Olive	kilogr.	1,059,532	458,892
Other Kinds	,,	4,663,048	4,748,690
Cocoa	,,	556,434	731,011
Coffee	,,	9,700,895	10,706,475
Pepper	,,	874,204	1,245,359
Sugar	,,	52,608,032	59,873,259
Chemicals	,,	7,737,925	12,089,245
Colours	,,	1,036,753	1,250,447
Stuffs for Dyeing and Tanning	,,	8,186,792	10,392,771
Wax	,,	729,158	922,471
Soap	,,	697,271	738,511
Oleaginous Seed	,,	3,915,907	3,376,228
Cheese	,,	4,141,818	4,833,752
Fish	,,	22,915,913	25,355,687
Horses	number	9,745	15,862
Cattle	,,	71,215	64,236
Sheep	,,	27,885	17,050
Furs	kilogr.	64,880	76,730
Hides: Raw	,,	5,432,780	9,968,529
Tanned	,,	728,260	769,589
Other Kinds	,,	249,226	384,360
Dressed	,,	53,269	104,507
Hemp and Flax	,,	1,135,751	1,384,334
Yarn of Flax	,,	1,793,913	3,546,068
Cloths of Mixed Material	,,	810,716	1,095,939
Other Manufactures of Hemp and Flax	,,	369,239	275,513
Cotton: Raw	,,	4,044,202	4,114,982
Yarn	,,	5,482,117	5,684,517
Mixed Stuffs	,,	7,590,633	6,884,709
Other Tissues of	,,	492,653	451,080
Wool	,,	3,960,230	3,713,004
Woollen Yarn	,,	215,050	130,790
Mixed Stuffs	,,	2,903,578	3,267,065
Other Tissues of	,,	441,536	234,400
Silk: Raw	,,	1,872,373	1,383,632
Thrown	,,	9,842	437,076
Mixed Stuffs	,,	187,613	232,099
Other Tissues of	,,	48,961	37,298
Wheat	litres	321,955,456	445,493,877
Grain	,,	78,032,351	45,657,506
Flour	kilogr.	7,967,165	9,429,001
Charcoal	,,	10,956,220	9,895,959
Firewood	,,	28,516,556	40,396,321
Wood for Cabinet-making	,,	873,318	1,532,523
Furniture	,,	143,011	290,628
Wooden Wares	,,	230,654	222,398
Paper	,,	1,310,259	1,273,278
Paper Hangings	,,	180,479	271,064
Books	,,	427,807	407,367
Mercery and Small Wares	,,	1,719,743	1,907,623
Millinery	,,	9,092	10,437
Machinery	value in lire	6,791,736	4,437,032
Rags	kilogr.	1,337,047	1,280,232
Iron: Cast	,,	22,730,028	19,708,643
Wrought	,,	3,881,587	6,107,692
For Railways	,,	2,616,610	2,232,676
Iron: Ore	,,	18,934,142	18,094,158
Of the 1st Fusion	,,	37,711,036	44,377,136
Rails	,,	11,380,938	27,241,423
Wrought	,,	8,745,233	12,275,778
Copper: Raw	,,	1,038,027	1,863,013
Wrought	,,	667,459	999,185
Lead: Raw	,,	2,313,459	4,765,620
Wrought	,,	129,354	286,934
Sulphur	,,	1,349,356	785,818
Coal	,,	347,424,499	418,934,682
Pottery	,,	1,874,653	2,807,540
Porcelain	,,	423,072	426,539
Glass and Crystal	,,	5,950,854	9,221,761

The total value of the imports of 1863 amounted to nearly 18,000,000*l.*, to which France contributed 7,033,984*l.*, Great Britain 5,903,233*l.*, Austria, 1,872,222*l.*, and Switzerland 1,341,033*l.*

The quantities of the principal articles exported from the kingdom of Italy, in each of the years 1862 and 1863, are given in the subjoined table:—

		1862	1863
Wine	litres	25,867,251	24,894,131
Oil: Olive	kilogr.	53,626,632	35,111,905
Other kinds	,,	271,622	337,651
Confectionery	,,	121,402	114,017
Manna	,,	264,764	359,973
Liquorice	,,	458,195	184,136
Lemon Peel	,,	126,951	30,809
Chemical Productions	,,	1,649,324	3,959,713
Salt: Marine	,,	64,268,184	116,769,706
Mineral, &c.	,,	2,700,800	3,394,288
Dyeing Stuffs: Unground	,,	3,814,741	5,065,443
Ground	,,	18,669,398	21,005,929
Soap	,,	335,070	238,334
Soda	,,	620,598	1,045,044
Fruit	,,	44,989,403	75,033,710
Almonds: in the Shell	,,	402,830	449,527
Kernel	,,	1,505,186	3,625,344
Oleaginous Seeds	,,	11,445,743	10,660,169
Cheese	,,	1,266,334	2,308,264
Fish	,,	1,383,200	1,333,546
Horses	number	1,375	1,709
Cattle	,,	48,161	64,986
Sheep	,,	68,645	33,400
Skins: Raw	kilogr.	978,744	1,335,446
Tanned	,,	151,902	161,224
Hempen Cords	,,	1,067,700	1,135,538
Cloths	,,	613,264	706,217
Cotton: Yarn	,,	67,668	131,270
Stuffs	,,	168,026	123,822
Silk: Raw	,,	2,047,899	2,540,489
Thrown	,,	617,680	—
Moresk	,,	1,072,968	1,462,498
Tissues of	,,	43,817	42,036
Wheat	litres	20,625,887	21,091,875
Grain	,,	33,726,126	57,285,830
Rice	kilogr.	34,704,633	48,017,737
Pastes	,,	1,645,438	3,355,581
Charcoal	,,	34,547,800	38,242,232
Firewood	,,	13,894,749	14,050,727
Sugar	,,	602,914	646,573
Paper	,,	2,558,016	3,468,355
Books	,,	449,212	108,416
Rags, of all kinds	,,	8,312,431	10,432,144
Bones	,,	4,894,450	5,804,739
Brass	,,	2,133,378	4,838,269
Lead	,,	9,752,182	6,991,334
Sulphur	,,	151,567,036	173,971,445
Common Pottery	,,	2,281,420	1,107,273

The value of the imports of British and Irish produce into Italy, in the years 1862 and 1863, was distributed as follows between the five great divisions of the kingdom:—

	1862	1863
	£	£
Sardinia, including the Island	2,143,772	2,116,269
Tuscany	935,426	1,073,879
Naples	988,837	1,626,674
Sicily	540,067	682,718
Adriatic Ports of Ancona and the Romagna	448,227	403,693
Total	5,056,329	5,903,233

Shipping.—The total number of ships engaged in the foreign commerce of Italy during the year 1862 was 40,692, tonnage 5,801,843, of which 20,188 entered the ports of the kingdom, and 20,576 cleared. These figures include 3,576 steamers arriving, and 3,418 departing. Sailing navigation bears the proportion to steam-navigation of 83 per cent. Out of every 100 sailing ships 61 sail under the national flag, while out of every 100 steamers only 21 carry Italian colours. The coasting trade employed 173,695 vessels, tonnage 8,495,802; and the steamers arriving numbered 7,441, tonnage 1,534,507. Almost the whole of the coasting trade is carried on in native bottoms. There are not more than 16 foreign vessels in 1,000 engaged in it; but out of every 100 steamers engaged in it, 19 are foreign. The

Digitized by Google

navigation with foreign ports compared with the coasting trade is as 1 to 4.

The number of seamen employed amounted in 1862 to 948,819, of whom 259,669 were engaged in the foreign commerce, and 689,150 in the coasting trade. The foreign seamen numbered 201,080, and the native 747,739. For every 100 tons of shipping engaged in foreign commerce, the crew was 9 men, and 16 men for every 100 tons engaged in the coasting trade.

The number of fishing boats was 8,835 of which 7,822 were engaged in coast fishing, and 657 in deep-sea fishing, the remainder in foreign waters. 374 boats were employed in the coral fisheries in national waters, and 140 in foreign waters.

The number of large sailing vessels at the same period was 22,656, of a tonnage of 983,562. The shipping was distributed as follows:—

	Ships	Tons
Kingdom of Italy . . .	16,500	666,624
Istria and Venice . . .	5,858	312,250
Papal States	298	4,688
Total . .	22,656	983,562

It would appear, therefore, that, with the exception of Great Britain, the Italian merchant service is larger than that of any other country. It is to be remarked, however, that in all these official returns Istria and Venice, as well as the Roman States, are considered as part of Italy.

Army and Navy.—The Sardinian law of conscription forms the basis of the military organisation of the kingdom of Italy. According to it, a certain portion of all the young men of the age of twenty-one is levied annually for the standing army, while the rest are entered in the army reserve. The standing army is divided into six corps d'armée, each corps consisting of three divisions, and each division of two brigades; four or six battalions of 'bersagliere,' or riflemen, two regiments of cavalry, and from six to nine companies of artillery. Reduced into practice, the formation of the army is as follows:—

Infantry	Men
6 regiments of grenadiers	17,946
6 ,, of infantry of the line . .	185,442
42 battalions of 'Bersagliere'	24,288
Total infantry . .	227,796

Cavalry	Men
4 regiments of cuirassiers . . . }	
6 ,, of light dragoons . . }	14,688
6 ,, of lancers . . . . }	
1 ,, of 'guides'	1,064
Total of cavalry .	16,920

Artillery	Men
9 regiments or 72 companies of foot artillery	25,340
2 ,, of sappers and miners . .	6,006
3 ,, of horse artillery and train .	9,240
Total artillery and train .	40,586

The standing army is completed by fourteen legions of 'carabinieri,' or gendarmes, numbering 18,461 men, and a staff of 210 men; which brings the total of the forces of the kingdom of Italy, as they ought to exist according to the military organisation, up to 303,048. But in reality, the strength of the army is far below this number.

The navy of the kingdom consisted, at the commencement of 1864, of 98 steamers, of 20,760 horse-power, with 2,160 guns, and 17 sailing vessels, with 279 guns; altogether 115 men-of-war, with 2,439 guns. The list comprised—

	Horse-power	Guns
5 iron-clad frigates of	800	60
1 screw-steamer of the line of	450	70
18 screw-steam frigates of	5,800	575
14 paddle-steam frigates of	4,300	102
4 screw-steam corvettes of	888	108
20 paddle-steam corvettes of	1,880	65
14 screw-steam gun-boats of	544	50
2 sailing frigates		92
4 sailing corvettes		67
11 brigantines		120

The rest of the fleet consisted of smaller vessels, including a number of transport steamers of 200 horse-power, with two guns each.

Constitution and Government.—Previous to the events of 1860-1861, which resulted in the formation of the kingdom and the growth of national life, there was but the shadow of popular representation in Italy. The little duchy of Lucca had its senate of 36 representatives, of the classes of merchants, scholars, artisans, and cultivators, and the Lombardo-Venetian kingdom had also its two provincial assemblies; while the kingdom of Sardinia succeeded in obtaining a liberal constitution in 1848. But the provincial assemblies of the Lombardo-Venetian kingdom were divested of all legislative powers, and elsewhere the governments of Italy were mere petty despotisms. The war and revolutionary events which united the various Italian territories under one rule, entirely changed this state of things, by transforming the government into a constitutional monarchy.

The present constitution of Italy is an expansion of the 'Statuto fondamentale del Regno,' granted on March 4, 1848, by king Charles Albert to his Sardinian subjects. According to this charter, the executive power of the state belongs exclusively to the sovereign, and is exercised by him through responsible ministers; while the legislative authority rests conjointly in the king and parliament, the latter consisting of two chambers, an upper one, the Senato, and a lower one, called the 'Camera de' Deputati.' The senate is composed of the princes of the royal house who are of age, and of an unlimited number of members above 40 years old, who are nominated by the king for life. The deputies of the lower house are elected by the majority of citizens who are 21 years of age, and pay taxes to the amount of 40 lire, or 1*l.* 12*s.* For this purpose the whole of the population is divided into electoral colleges, or districts. No deputy can be returned to parliament unless at least one-third of the inscribed electors appear at the poll. A deputy must be 30 years old, and have the requisites demanded by the electoral law, among them a slight property qualification. Neither senators nor deputies receive any salary or other indemnity. The duration of parliaments is five years; but the king has the power to dissolve the lower house at any time, being bound only to order new elections, and convoke a new meeting within four months. It is incumbent upon the executive to call the parliament together annually.

Religion and Education.—The Roman Catholic faith, to which the overwhelming majority of the inhabitants belong, forms the state religion, but all other forms of belief enjoy the fullest toleration. The Roman Catholic hierarchy consists of 45 archbishops and 198 bishops. All these dignitaries of the church are appointed by the pope, on the advice of a council of cardinals, the congregation *de propagandâ fide*. But the royal consent is necessary to the installation of a bishop or archbishop, and this having been frequently withheld of late years, there were no less than thirty-five vacant sees, about one-seventh of the whole

Digitized by Google

number, in the kingdom of Italy at the commencement of August, 1865. On the death or removal of a bishop, the clergy of the diocese elect a vicar-capitular, who exercises spiritual jurisdiction during the vacancy. In case of old age or infirmity, the bishop nominates a coadjutor to discharge the episcopal duties in his stead. His recommendation is almost invariably attended to by the pope, and the bishop-coadjutor is appointed and consecrated, and takes his title from some oriental diocese not actually existing, which he relinquishes on succeeding to a bishopric. As long as he retains the oriental title, he is styled a bishop *in partibus infidelium*, or, as usually abridged, a bishop *in partibus*. Each diocese has its own independent administration, consisting of the bishop, as president, and two canons, who are elected by the chapter of the diocese.

The immense wealth of the North Italian clergy has been greatly reduced since the year 1850, when a bill, annihilating ecclesiastical jurisdiction and the privileges of the clergy, passed the Sardinian chambers. This law was extended, in 1861, over the whole of the kingdom of Italy. By a royal decree of May 25, 1855, there were confiscated, in the kingdom of Sardinia, the following establishments of the church of Rome:—

		Annual Income Lire
66 monasteries on the continent, with .	772 monks and	770,000
46 Do. do. do.	1,085 nuns „	592,000
40 monasteries on the island of Sardinia	489 monks and nuns	369,000
182 alms-seeking convents, with . .	3,145 monks	—
65 chapters, with .	680 priests and	550,000
1,700 ecclesiastical benefices, with . . .	1,700 clergy	1,370,000
2,099 { clerical establishments }	with 7,871 { individuals and }	3,641,000

Or, 145,640*l.* annual income.

According to official statements, the regular income of the whole Sardinian clergy, at the period of the royal decree of 1855, amounted to 18,000,000 lire, or 720,000*l.*, per annum.

When the monastic orders were partially suppressed in the former kingdom of the Two Sicilies, in February, 1861, the number of religious establishments for men was found to be 1,020, containing 13,611 inmates, of which number 8,899 lived entirely upon alms. The remaining 4,712 monks possessed an annual revenue of 4,555,968 lire, or 967 lire, equal to 39*l.* per head. Of nunneries there were 272, with 8,001 inmates, possessing an income of 4,772,794 lire, or 24*l.* per head. A previous return, of the year 1834, showed that there were in the kingdom of Naples 14 archbishops, 66 bishops, 26,800 ordained priests, 11,730 monks, and 9,520 nuns.

Under the new Italian government a great part of the property confiscated from the monastic establishments has been devoted to the cause of public education, for which, besides, an annual credit of 15,000,000 lire, or 600,000*l.*, is voted by the parliament. Since the commencement of the year 1861, there were opened throughout the kingdom, thirty-three great model schools, of which ten are in the Sardinian states, six in Lombardy, four in the Emilia, six in the Marches and Umbria, two in Tuscany, and five in the Southern provinces. In the former kingdom of the Two Sicilies, public education stood very low prior to 1860. From an examination made by the new government, it appeared that there were 3,094 large parishes which had no schools whatever, and 920 others in which the public instructors were individuals themselves devoid of the most elementary knowledge. The administration immediately set to work to apply a remedy to this state of things, and before the end of 1861—that is, in the course of little more than a year—1,054 elementary boys' schools were established in the ex-kingdom of Naples, exclusive of the central province of Naples itself. These were frequented by 23,569 pupils. The elementary girls' schools founded during the same period of time were 778, with 18,912 pupils. To these must be added 18 evening schools, frequented by 911 persons. In 1862 the 1,054 boys' schools rose to the number of 1,603; the pupils, instead of 23,569, became 60,250. The girls' schools were no longer 778, but 922; the pupils, not 18,912 but 30,567. The evening schools increased from 18 to 234; their frequenters from 911 to 9,804.

There are thirteen universities in Italy, including the Roman States. These are—Bologna, founded in the year 1119; Naples, founded in 1244; Padua, in 1228; Rome, in 1244; Perugia, in 1320; Pisa, in 1329; Siena, in 1349; Pavia, said to have been established by Charlemagne in 774, reorganised in 1390; Turin, founded in 1412; Parma, in 1422; Florence, in 1443; Catania, in 1445; Cagliari, in 1764; and Genoa, in 1783. To these may be added the high schools of Palermo, Camerino, and Macerata, and the university of Modena, which latter was closed in 1849.

Revenue and Expenditure and Debt.—The budgets of the kingdom of Italy for the two years 1864 and 1865, were as follows:—

	1864	1865
Total estimated Revenue .	£25,844,749	£25,020,101
Total estimated Expenditure	35,214,417	34,152,761
Deficit . .	£9,369,668	£9,132,660

The actual revenue and expenditure for the two years 1862 and 1863, was as follows:—

	1862	1863
Total Revenue . . .	£23,628,076	£23,436,566
Total Expenditure . .	39,023,703	38,519,788
Deficit . .	£15,395,627	£15,083,222

To cover these large annual deficits, the Italian government has had recourse, at various times, to loans of a considerable amount.

The total amount of the public debt of the various provinces of the kingdom, in the year 1860, amounted to:—

	Lire	£
Sardinian States .	1,159,970,595	46,398,823
Lombardy . . .	145,412,988	5,816,519
Emilia	42,000,000	1,680,000
Tuscany . . .	209,000,000	8,360,000
Naples and Sicily	550,000,000	22,000,000
Total. . .	2,106,383,583	84,255,342

By a law of June, 1861, all these obligations were ordered to be inscribed into a 'Great Book,' and to be united into a national debt of the kingdom of Italy, the whole to bear interest at the rate of 5 per cent. Various loans were subsequently added to this national debt. In July, 1861, a loan of 500 millions of lire was contracted; on March 6, 1863, a further loan of 700 millions of lire was ordered to be issued; and a fresh loan of 425 millions of lire, or 17,000,000*l.*, was sanctioned April 25, 1865. On January 1, 1864, the whole debt of the kingdom of Italy amounted to 3,817,470,979 lire, or 152,698,839*l.* The interest on this capital amounted to an annual burthen of 197,417,245 lire, or 7,896,689*l.*, distributed as follows:—

Digitized by Google

	Lire
Debt of the 'Great Book,' 5 per cent. consols	125,706,030
Debt of the 'Great Book' 3 per cent. consols	6,421,624
Debt included in 'Great Book'	60,422,660
Debt not included	4,454,930
Concomitant expenses	412,000
Total	197,417,245
	£7,896,689

The debt not included in the 'Great Book, and which consumes an annual interest of 4,454,930 lire, or 178,197*l*., consists chiefly of local obligations and communal bonds of the south Italian provinces.

For further particulars concerning the physical aspect, population, industry, and history of the kingdom, see the names of the various territories and states which formed the old political divisions of Italy.

ITALY (AUSTRIAN). Under this term are included all the Austrian territories within the limits of Italy, comprising a portion of the former Lombardo-Venetian kingdom, and extending over a space of 8,720 Eng. sq. m., with a pop., in 1864, of 2,446,056 inhabitants, or 280 per sq. m.

The N. part of this territory is mountainous; the S. flat forming a portion of the plain of Lombardy. The Alpine chains on the N. frontier rise to an elevation of more than 13,000 ft. above the sea. The greater part of the surface, however, is flat: the flat lands comprising the delegs. of Padua, Rovigo, Venice, and parts of Verona and Vicenza. The shores of the Adriatic are lined with extensive lagoons, in the midst of which is Venice. A succession of marshes extends along the banks of the Po, in the lower part of its course, and round its embouchure is a dreary tract of swampy ground scarcely enlivened by a single tree.

The central parts of the high mountain chain consist of granite and other primary formations: the lower hill ranges consist chiefly of secondary limestone. The country north of the Po is a vast alluvial plain, containing numerous fossil remains. Traces of former volcanic action exist in the Euganean hills, an isolated group to the SW. of Padua. Lava, basalt, iron, coal, turf, potter's clay, some copper, arsenic, marble, and alabaster, are the most important mineral products. The climate is generally healthy, except in the rice grounds along the Po, in the vicinity of Mantua, and near the Adriatic. The thermometer, though it keeps much higher in summer, generally sinks lower in winter in Lombardy than in England. The mean temp. of the year at Padua is 56·6. More rain falls in this than in any other portion of the Austrian dominions: in the government of Venice the mean annual amount is estimated at 34 inches. The greatest fall is in autumn and winter.

The tops of the Alps are naked, covered with snow, and interspersed with glaciers; but their sides are for the most part covered with fir, larch, oak, pine, chesnut, and other trees, or natural pasturages. Most of the productive land in the mountains consists of pastures. Only the lower border of the mountain belt is arable: the land is there frequently cut into terraces, one above another, the divisions being occasionally supported by stone walls. The earth that fills these terrace trenches is continually carried down to the lower levels by the action of rain and other causes, and has to be brought up again every two or three years, often on peasants' backs, the routes being impracticable for vehicles. The vine, mulberry, walnut, and various other fruit trees, barley, rye, a little wheat, buckwheat, *panico*, millet, kitchen vegetables, hemp, and flax, are the chief agricultural products of this region. The land is here divided into the most minute portions; and being, as it were, the one thing needful to existence, the greatest value is attached to its possession. In the central region, or hill country, properties are less divided; though they are there split into small stewardships. These farms are mostly the property of the higher classes, and of the inhabs. of cities. There is scarcely a single peasant proprietor, the peasantry being mere tenants, paying, in general, a rent of half the produce. A lease at a fixed rent, or a money rent, is extremely rare. Silk, wines, oranges, lemons, olives, and other fruits, corn, cheese, and cattle, are the chief products of this region: the culture of the silkworm is an important occupation of the peasants' families, and with the money gained from this source, they provide themselves decently with the necessaries of life.

The aspect of this south-western part of Austrian Italy is very pleasing. Flourishing villages, hamlets, and isolated houses are spread over it, connected by carriage roads made at the expense of the proprietors and communes, which latter possess a considerable portion of the soil in this and the next region. In the high flat country, or that part of the plain near the hills, small stewardships are not uncommon. The system is that of *pignionanti*, or sharing-tenants; that is, tenants who pay a rent in money for their house, and a fixed rent in kind for the ground. The mode of irrigation deserves some notice. It is effected in the first place by *fontanili*, or excavations in the earth, in which are placed long tubes, from the bottom of which bubble up copious streams of water, analogous to Artesian wells. From the *fontanili* the water is conducted into a ditch, by which it is carried to irrigate the fields placed on a lower level. To these natural waters, derived from the subterraneous springs, replenished by a constant supply from the mountain region, are added a great mass of water drawn from the rivers by means of canals, some of which are navigable. The waters are diligently measured by rules, derived from hydrostatic laws, which have passed into an habitual practice. The canals are provided with graduated doors, which are raised or lowered according as the case may be: they are termed *incastri*. The measure is called *oncia*, and corresponds to the quantity of water which passes through a square hole. Sometimes the same number of inches of water is given out by the day and the hour on different farms. The value of a property depends on the command and goodness of the water; if deprived of the fertilising fluid, it would diminish rapidly in price. Hence the state of the waters is the object of local statutes, and of diligent care and attention.

Maize is grown in considerable quantities near Verona, and the mulberry very extensively between that city and Mantua, and towards Vicenza. The mulberry trees are frequently planted all round the corn fields, and vines festooned from one tree to another, so that on the same ground three crops—silk, wine, and grain—are annually produced. From Verona to Vicenza the meadows are irrigated with great care as well as facility, by means of the numberless streams that flow into the Adige, the beds of which, being continually raised by the gravel they bring down, and artificially embanked, are, for the most part above the general level of the plain. Notwithstanding the fertility of the soil, the inhabitants are generally poor. A few large farming establishments may be seen, but no comfortable cottages, or signs of wealth, among the peasantry, who bear a very in-

Digitized by Google

different character. The fields about Vicenza, however, are kept with great neatness, and cultivated with much industry, presenting a favourable contrast to those about Padua. On the road between those two cities all beauty of scenery disappears. Willows in all their pollard ugliness, and long lank poplars trimmed to the top, afford a yearly crop of faggots, the only fuel of the country. The tops of the pollarded trees near Vicenza may be seen cut almost in the shape of goblets, for the sake of holding the leaves of the maize placed there for drying. Potatoes are often cultivated amidst the corn. On the road may be seen immense butts full of grapes, mounted upon clumsy waggons, to which they are secured by such iron rings and chains as would hold a frigate at her moorings, dragged along by four, six, or eight oxen, when a proper vehicle would not require more than a pair. The grain produced in the Venetian prov. leaves a surplus over what is required to meet the home demand. Good husbandry diminishes eastward, and Istria is a country which would scarcely repay it. That peninsula is a collection of barren limestone hills, interspersed with a few fertile valleys: it yields very little corn, and the expenses of cultivation nearly absorb the profits. Wood is scarce, and fuel has mostly to be brought from Carniola or elsewhere. The oils of Istria, however, are frequently as good as those of Tuscany, and form its chief export. Some of its wines, also, are good, but the inhab. are more a commercial and sea-faring, than an agricultural or manufacturing, people. (See ILLYRIA.)

Government, Army, and Education.—The government of Austria in Italy is so liable to be disturbed, through the rooted dislike entertained by the Italians for the Germans, as to require the most vigilant attention on the part of the Austrian ministry. The policy of the latter has been to restrict the power and privileges of the nobles and large proprietors, who have generally been found at the head of any popular movement; and, at the same time, to conciliate the middle and lower classes. Accordingly, the representation in the council of the province has been rendered more complicate than in the other parts of the empire. The province has its assembly, with attributes and powers similar to those of the other seventeen provincial diets of the empire; but the composition is somewhat different. The members are appointed through the medium of a triple stage of election. The two classes of *Contadini*, the proprietors of land, and *Cittadini*, the inhab. of towns, are the primary electors, the suffrage depending on the payment of a certain amount of taxes. These primary electors return from their general body a council of election, the members of which must possess a higher property qualification than is requisite for the primary electors. The council finally elect the members of the provincial diet. The diet of the province has power to make laws concerning local administration, but is otherwise without influence.

Justice is administered by courts of primary jurisdiction in the principal towns; and a high court of revision sits in Verona. Trial by jury and *viva voce* pleadings and examinations are unknown. A strict censorship is established over the press, and only certain foreign journals or books can be imported. Two regiments are maintained for the police service. Four regiments of the line in the Austrian army are levied in the prov., but there is no militia. All males, whether noble or otherwise, are registered for military service at the age of eighteen, unless exempted from physical or other causes. From those thus registered the number required are taken by ballot; but all are allowed to serve by approved substitutes, for whom, however, it is often necessary to pay large sums. The period of service is eight years, after which the soldier is entirely free.

Large sums are expended by the government in keeping up the roads and other public works, and in public education. A larger proportion of the pop. is educated than in any other prov. of the Austrian empire, except the Tyrol and Bohemia. By a law of 1822, every commune is obliged to maintain a primary school, either wholly or in part. But education is wholly under the direction of the clergy; and no school can be opened, or book used in a school, or other seminary, without the express sanction of the government.

History.—The greater part of this portion of Italy, after the fall of the Western Empire, was successively possessed by the Heruli, Ostrogoths, Greeks, and Lombards. The latter held it from 568 till 774, when Charlemagne annexed it to the empire of the Franks, to which it remained attached till 888. From that period, except the territory of the Venetians, it generally belonged to the German emperors. After the war of the Spanish succession, the duchies of Milan and Mantua were assigned to Austria, and remained in its possession till the year 1797, when the peace of Campo Formio made Lombardy over to France, and Austria in turn received Venice. But by the peace of Presburg, signed 1805, Austria had to cede the Venetian territory, besides the whole of Istria and Dalmatia, to France, and, four years after, the treaty of Vienna gave to France also Carniola and Trieste. All these possessions fell back to Austria in 1815. Venice and its territory, which had existed as an aristocratic republic from the seventh century to 1797, was likewise confirmed to Austria by the treaty of Vienna, in 1815. The Italian possessions of Austria were then erected into a Lombardo-Venetian kingdom, which existed till 1859, when, compelled by the victorious arms of France, Austria had to cede the greater part of Lombardy to the emperor Napoleon III., who in turn made it over to the king of Sardinia—subsequently king of Italy.

ITHACA, one of the Ionian Islands, and celebrated in antiquity as the kingdom of Ulysses ('scopulos Ithacæ, Laërtia regna,' Virg. Æn., iii. 275), 7 m. S. Santa Maura, 3 m. E. Cephalonia, and 17 m. W. the coast of Acarnania; Point Marmaca, at its N. end, being in lat. 38° 30′ N., and long. 20° 39′ E. Length, 14 m., breadth, 4 m., area, 44 sq. m. Pop. 11,756 in 1860. Ithaca presents from the sea the appearance of a barren, rugged rock, deeply indented on its E. side by a gulf, at the bottom of which is Vathy, the port and cap. of the island, accurately described in the Odyssey:—

> 'A spacious port appears,
> Sacred to Phorcy's power, whose name it bears;
> Two craggy rocks, projecting to the main,
> The roaring winds' tempestuous rage restrain;
> Within, the waves in softer murmurs glide,
> And ships secure without their hawsers ride.'
>
> POPE.

About a third part of the surface is capable of cultivation, the greater part of which is laid out in vineyards. The chief products are wine (esteemed in Greece as extremely delicious), olive oil, currants, barley, and a small quantity of wheat. Ithaca has little to interest, beyond the associations connected with its ancient history. Many of the places mentioned by Homer can be traced, with great appearance of probability. The port *Phorcys* is clearly identical with Molo, and the inner harbour of Vathy seems to correspond with

Digitized by Google

the παύλοχον Νείθρου σκέπας under Mount Neïson. In the S. part of the island, at no great distance from the shore, is a spring, rising at the foot of a rock still called *Koraka*, and supposed to be the Arethusa of Homer. (See Odys., v. 408.) Some ruins of Cyclopean walls, similar to those of Mycene and Tiryns, are considered by Dodwell to be the remains of the city of Ithaca, the residence of Ulysses. (See IONIAN ISLANDS.)

IVES (ST.), a parl. bor., sea-port, and par. of Cornwall, at the W. extremity of the bay of the same name, 18 m. W. Truro, and 250 m. W. by S. London by road, and 299 m. by Cornwall and Great Western railway. Pop. of munic. bor. 7,027, and of parl. bor. 10,353 in 1861. St. Ives consists principally of one long street, branching S. into two smaller; and the houses are generally of moderate size, and built in situations to suit the convenience of persons connected with the trade of the port. The church, a low but spacious building, erected in 1434, stands close to the sea: there are also four places of worship for dissenters, a national school, and two Sunday-schools. A grammar-school, founded by Charles I., has gone to decay. The town-hall and custom-house are the only other public edifices. The port has a pier, built by Smeaton, in 1770, at an expense of 10,000*l.*, within which small vessels lie aground at low water. Large ships may anchor in the bay, in 6 and 7 fathoms; but, being exposed to the N. winds, it is not much frequented. There belonged to the port, on the 1st of Jan. 1864, 70 sailing vessels under 50, and 98 sailing vessels above 50 tons burthen, besides 1 steamer of 150 tons. The principal employment of the inhabs. is the pilchard fishery, which of late has been carried on with more than ordinary success, and to a greater extent than in any other town of Devon or Cornwall. The season lasts from July to Sept., and in favourable years very large quantities are exported to the Mediterranean, a considerable supply being also furnished for the consumption of the town and neighbourhood. Several mines have likewise been opened in the vicinity, affording additional employment to the people. The corporation, chartered in the reign of James II., was, down to the passing of the Municipal Reform Act, a close, self-elected body of eleven members: it now comprises four aldermen, one of whom is mayor, and twelve councillors, and has a commission of the peace, under a recorder. Corporation revenue 285*l.* in 1862. The bor. sent two mems. to the H. of C. from the 5th of Queen Mary down to the passing of the Reform Act, which deprived it of one mem. Previously to the last mentioned act, the franchise was vested in the inhabs. paying *scot and lot*; the boundaries of the parl. bor. were then also enlarged, by the addition of the two adjacent pars. of Lalant and Towednak. Registered electors 525 in 1865, including 113 'scot and lot voters.' Markets on Wednesday and Friday; cattle-fair, Saturday before Advent.

IVÍZA or IBIZA (an. *Ébusus*), an isl. in the Mediterranean, forming one of the Balearic group belonging to Spain, 50 m. E. by N. Cape Nao in Valencia, and 42 m. SW. Majorca; the cap. on its SW. side being in lat. 38° 53′ 16″ N., long. 1° 26′ 32″ E. It is of an irregular five-sided figure; its length from NE. to SW. being 27 m., and its average breadth 15 m. Pop. 21,870 in 1857, living in 24 towns and villages. The coast is irregular, indented by a great number of bays, the largest being those of St. Antonio and Iviza: the surface is hilly, and in many parts well wooded; but there are several picturesque and fertile valleys having a soil well adapted for tillage. The climate is, in most respects, similar to that of Valencia and Catalonia: the winters are so mild that the thermometer seldom falls below 13° Réaum., and the heats of summer are tempered by the sea breezes. The chief products of the island are olives, wine, corn, flax, and hemp, different kinds of fruit, especially figs, for which it was celebrated even in the time of the elder Pliny. The salt-pans are so productive that salt is a chief article of exportation: large flocks of sheep are pastured on the hills, and the sea near the coast abounds with fish, the capture of which gives employment to many of the inhab. But, notwithstanding these advantages, the island is in great poverty owing to the indolence of the inhab., and their slovenly mode of tillage. The Ivizans are of middle size, shrunk and sallow; they speak a language similar to that spoken in Catalonia and Valencia, being a corrupt dialect of the ancient Romaunce, once the common language of all S. Europe.

The cap. Iviza—pop. 5,551 in 1857—is fortified, and has a good harbour. It is the residence of the governor and a bishop's see. The chief buildings are a cathedral, 6 churches, 2 convents, 2 hospitals, and a public school.

Iviza, the largest of two islands, called by Strabo *Pityusæ*, or the pine-bearing islands, was early occupied by Phœnicians and Carthaginians, whence it has been called *Ebosus Phœnissa* by Silius Italicus. (Pun., lib. iii. 1, 362.) It was taken from them by Q. Metellus, and remained subject to the Romans, and their successors the Vandals, till the conquest of Spain by the Moors in the 8th century. The Spaniards took the island in 1294, and attached it to the kingd. of Arragon, since which it has usually followed the fortunes of the larger islands, Majorca and Minorca. In 1706, during the war of the succession, it submitted to Sir John Leake with a British squadron, and was ceded to England, together with Minorca, at the peace of Utrecht. They continued in the possession of the British till the peace of 1814, when they were restored to Spain.

IVREA (an. *Eporedia*), a town of North Italy, cap. prov. of same name, on the Doire, 30 m. NNE. Turin, on a branch line of the railway from Turin to Milan. Pop. 9,563 in 1863. Ivrea is an ill-built town, defended by old fortifications, a citadel, and a small fortress upon an adjacent hill; and has an ancient cathedral, supposed to occupy the site of a temple of Apollo, five other parish churches, several convents, a hospital, a seminary, and a large prison. There are manufactures of silk fabrics and of organzined silk, and some recently established cotton-works; with markets for cheese, cattle, and other Alpine produce; and for the iron obtained near Cogne, and other places in its vicinity. Eporedia is reported to have been colonised by the Romans in the time of Marius. It would appear from Tacitus (Hist., i. 70) to have been a *municipium* as well as a colony. Strabo says that 36,000 Salassi, made prisoners by Terentius Varro, were sold here as slaves by public auction. Ivrea has been repeatedly taken by the French, and under the French empire was the cap. of the dep. Doire.

Digitized by Google

J.

JACA

JACA, or XACA, a town of Spain, prov. Aragon, cap. of a partido of its own name, 56 m. N. by E. Saragossa, and 32 m. NNW. Huesca, on the railway from Saragossa to the Pyrenees. Pop. 3,540 in 1857. The town stands at the foot of one of the highest ridges of the Pyrenees, only 21 m. from the French frontier, in a wide and fertile valley, enclosed by the rivers Aragon and Gallego: it is surrounded by a strong wall, and entered by 7 gates. The chief public buildings are a cathedral church, castle, military hospital, and 5 convents. The inhabs. are chiefly employed in agriculture and woollen weaving; but the difficulty of access to other places confines their industry to the supply of the town and immediate neighbourhood. The crops raised in the district comprise wheat, barley, pulse, and fruits, but the severity of the climate during winter prevents it from producing many of the fruits of S. Europe.

Jaca was a place of some consideration in the time of the Romans, and was the cap. of the *regio Jacatania*. It was taken by M. P. Cato, anno 195 A. C., and was made a station for the troops during the war with Spain.

JAEN, a prov. and former kingdom of Spain, in Andalusia, between lat. 37° 30′ and 38° 40′ N., and long. 2° 50′ and 4° 20′ W. Its shape is that of an irregular four-sided figure; and it is bounded N. by the Sierra Morena and La Mancha, W. by Cordova, S. by Granada, and E. by Murcia. Greatest length, 85 m.; greatest breadth, 78 m.; area, 4,430 sq. m. Pop. 345,879 in 1857, and 266,919 in 1846. The province, situated in the upper part of the valley of the Guadalquivir, is encircled by lofty mountains, which make access difficult, and give to its borders a rude and mountainous character. The surface is chiefly an alternation of hills and valleys, formed by the Guadalimar, Herrumblar, and other affluents of the Guadalquivir. The climate, though damp in some parts, is, on the whole, healthy and favourable to vegetation. The soil on the hills, consisting of *detritus* from the primitive and transition rocks of the Sierras Morena and Granada, is sandy and barren; but the valleys are extremely rich, and, with moderate attention to tillage, might be made highly productive. Agriculture, however, is in the most degraded state: only a very small portion of the soil is tilled, and the produce is insufficient for the consumption of the prov. Olives, wine, and other fruits of good quality, gall-nuts, woad, kermes, and shumac are abundant, and honey and silk are produced in small quantities. Cattle and horses, however, are pastured on a large scale, and a breed of the latter, peculiar to the neighbourhood of Ubeda, ranks as nearly equal to the Arabian. The mineral wealth of the province, which was celebrated even under the Romans, consists chiefly of iron, lead, and copper, with small quantities of silver; but lead and iron are the only ores now wrought. Veins of marble and jasper occur here as frequently as in Granada, but are not quarried, from want of spirit in the inhabs. Manufacturing industry is quite insignificant: silk and woollen fabrics are made in some of the towns; but the chief branch of employment is in pottery, and particularly in making *alcarrazas*, a species of porous earthen jars, much used in Andalusia for keeping liquors cool in warm weather.

JAFFA

JAEN, a city of Spain, cap. of prov. and partido same name, and a bishop's see, on the Jaen, an affluent of the Guadalquivir, 37 m. N. Granada, and 123 m. ENE. Madrid. Pop. 19,820 in 1857. The town is situated on the outskirts of the great Sierra de Susana, and is so surrounded by mountains, crossed by bad roads, that few travellers visit it. The railway from Madrid to Cadiz, however, passes not more than a dozen miles to the northward, and a modern road, joining the old high road between Cordova and Madrid, and passing through Baylen and the Puerto de Penacerrados of the Sierra Morena, has made it more easy of access. The city, above which towers a Moorish castle commanding a fine view of the whole country, has extremely narrow streets, a cathedral, 12 par. churches, and 15 convents. The cathedral is of Corinthian architecture, 300 ft. long, by 190 ft. in breadth, and built in a very pure style: the pavement is laid in chequered slabs of black and white marble, and the high altar is enriched with fine specimens of jasper and marbles: it also has some good pictures and sculptures. The city, which was celebrated, under the Moors, for its manufactures, still contains numerous fabrics of silk, linen, and woollen cloths, and mats, and has a thriving appearance.

The remains of a Roman aqueduct, and various inscriptions, prove the antiquity of Jaen. Under the Moors it rose to considerable importance, and successfully withstood the attacks of the kings of Castile. It was the theatre of war during the final struggles between the Moors and Spaniards in the 15th century, since which time it has never recovered its former consequence.

JAFFA, or YAFFA (an. *Joppa*), a town and port of Turkey in Asia, on the coast of Syria, pach. Damascus, sandjiak Gaza, 32 m. NW. Jerusalem, and 60 m. SSW. Acre; lat. 32° 3′ 25″ N., long. 34° 46′ 10″ E. Pop. estimated at about 4,000, one fourth of whom are Christians. Jaffa is fortified, and stands on a tongue of land projecting into the Mediterranean, and rising from the shore in the form of an amphitheatre, at the top of which is a ruined castle. The port, defended by two batteries, is merely a long basin, enclosed by a ledge of rocks, extending from the S. side northward, directly in front of the town; but it is so choked up with sand as to be unapproachable by all except small coasting craft. The houses are chiefly of stone, and the streets are uneven, narrow, badly paved, and dirty; the principal public buildings are 3 mosques, 1 Rom. Cath. and 2 Greek churches, with 3 convents, and a good bazaar. The quarantine house, recently founded, is clean and well regulated: separate divisions, with a chapel attached to each, being allotted to the pilgrims of the several nations, chiefly Greek, who land here on their way to Jerusalem. A military establishment is kept up, comprising (according to Dr. Bowring) 1 reg. of infantry, with 4 battalions of 800 men, and 3 cavalry regs., each having 700 men. A considerable traffic has recently been created by the disturbances in Syria for the supply of the pacha's troops; but usually the town

Digitized by Google

is dull, and little frequented by strangers, except at pilgrim time, when the pop. is often nearly doubled. Cotton is raised to some extent within the district; and in the neighbourhood are beautiful gardens of orange and lemon trees, tall waving cypresses, coral, and fragrant mimosas, intersected with enormous prickly pears. The fruit bears a high character, and forms a considerable article of export. Tradition assigns to Joppa an exceedingly ancient date. Joshua defined the possessions of the tribe of Dan as including 'the border before Joppa.' (Josh. xix. 46.) In the time of Solomon it was, no doubt, a port of some consequence; for Hiram, king of Tyre, sent a letter to the former monarch, then engaged in building the temple at Jerusalem, saying, 'We will cut wood out of Lebanon as much as thou shalt need; and we will bring it thee in floats by sea to Joppa, and thou shalt carry it up to Jerusalem:' and from this place Jonah took his passage in a ship going to Tarshish, when 'he fled from the presence of the Lord.' In the New Testament it is mentioned as the place where Peter had the vision which revealed to him the duty of preaching Christianity to the Gentiles as well as the Jews; and where he raised to life Dorcas, a faithful disciple, 'full of good works and almsdeeds.' Among the Greeks and Romans, also, Joppa had the reputation of being very ancient. It is stated by Pliny (Hist. Nat., lib. ix. § 5.) to be the place where Andromeda was exposed to the sea monster, from which she was rescued by Perseus. Reland suspects that this fable may have its origin in, or be connected with, the history of Jonah. (Relandi Palestina, p. 864.) In A.D. 66, during the Jewish wars, it was repeatedly taken, and finally all but destroyed: and during the Crusades it was so entirely ruined by Saladin, that it had scarcely any buildings left, except its two castles. It was soon afterwards repaired by Louis IX. of France. The subsequent history of the place, till the close of the last century, is little known. In 1799 it was taken by Napoleon, after an obstinate and murderous siege. On this occasion Napoleon put to the sword about 1,200 Turks that had formed part of the garrison of El Arisch, which, having previously capitulated, had been discharged, on their engaging not to serve against the French. But though their execution was, no doubt, justifiable, according to the laws of war, still it seems to have been an act of extreme and useless cruelty, and wholly at variance with the general conduct of Napoleon.

JAFFNA, a sea-port town of Ceylon, near the N. extremity of the isl., cap. of the distr. Jaffnapatam, 190 m. N. Colombo; lat. 9° 36′ N., long. 79° 50′ E. Pop. estimated at 8,000, chiefly Mohammedan. The town stands on an inlet, navigable for boats, which communicates with the Gulf of Manaar. It has near it a pentagonal fortress of some strength, which forms the head quarters of one of the principal garrisons in the island. As a commercial port, Jaffna is the third in Ceylon, ranking after Colombo and Point de Galle. Provisions are cheap; and from its salubrity the town is a favourite resort of the Dutch residents in Ceylon, who have named several small and verdant islands in the opposite roadstead after the principal cities of Holland.

JAGO (ST.), or SANTIAGO DE CUBA, a city of Cuba, cap. of its E. division, the second in pop. and magnitude, and the third in mercantile importance in the island, about 6 m. from the S. coast, on the river Santiago, the mouth of which forms its port, about 470 m. ESE. Havannah, lat. 19° 57′ 29″ N., and long. 78° 23′ W. Pop. 29,980 in 1857, inclusive of 8,000 slaves. The city is well built, having wide streets and stone houses. It has a cathedral, several other churches, a college, hospital, and numerous convents and schools. The port is from N. to S. about 4 m. long, with an irregular breadth, and in some places rather narrow; but it has water sufficient for ships of the line, and is sheltered from winds on every side. Its entrance is narrow, and defended on the windward side by the Morro and Estrella castles. The city is very unhealthy; being hemmed in by mountains on three sides, the free circulation of air is greatly impeded, and the yellow fever commits great ravages in the rainy season. St. Jago is the see of an archbishop, and the residence of a governor, who, in respect of civil and political affairs, is independent of the captain-general. It was the cap. of Cuba till the beginning of the 18th century, when the Havannah was raised to that dignity; since which the importance of Santiago has diminished. Its trade has however, of late years, increased considerably, partly on account of its being the port where the copper ore of the Sierra de Cobre is shipped. St. Jago was founded by Diego Velasquez in 1514.

JAGO (ST.) or SANTIAGO, a city of Chili, of which it is the cap. and seat of government, in the prov. of the same name, on the Maypocho, at an elevation of 2,600 ft. above the sea, 64 m. ESE. Valparaiso, and 270 m. NNE. Concepçion; lat. 33° 16′ S., long. 69° 48′ W. Pop. estim. at 75,000 in 1864. The city is situated on the verge of the extensive and fertile plain of the Maypocho, and at a distance has a very imposing appearance, its domes and steeples rising among groves, vineyards, gardens, and maize fields. It is inferior to Lima and Buenos Ayres in its public buildings, but greatly surpasses them in cleanness and regularity, and is, upon the whole, one of the best cities in S. America as to appearance, convenience, and salubrity. Like other cities of Spanish origin, it is divided into *quadras*, that is, squares or compartments of buildings 408 ft. square, separated by streets about 13 yards across. The city-proper is on the SW. bank of the Maypocho, and is connected with its suburb of La Chimba by a handsome stone bridge. On its SE. side the city is separated from its suburb of Cañadilla by the Cañada, a handsome promenade 50 yards wide, planted with poplars; and at the SW. extremity of Santiago is the suburb of Chuchunco. Both the city and suburbs are built upon ground sloping gently towards the W., of which circumstance advantage has been taken in supplying water for its consumption and underdrainage, which latter is more perfect than in any other S. American city. The waters of the Maypocho are also frequently employed for the ornament as well as use of the city, there being numerous public fountains and reservoirs. A solid brick rampart, 6 ft. in breadth, and raised 10 ft. above the ground, extends along the S. bank of the river, and protects the city against inundation from the river during the rains. Between it and the town is the *Alameda*, the favourite promenade of the inhab, planted with willows, and furnished with seats and fountains. At the NE. extremity of the city-proper is the hill of Santa Lucia, the site of the fortress of the same name built to command the town. Santiago has no other defence, and this fortress could be easily silenced by artillery placed on the contiguous hills.

The houses of the city occupy a good deal of ground; most of them take up 1–6th part of a *quadra*. The rooms are ranged round three quadrangles or *patios*, the first being an outer paved court-yard, the second generally laid out as a parterre, and the third used for domestic purposes. The wide archway opening into the front *patio*

Digitized by Google

is closed at night by a pair of large folding gates, but is always open during the day. The windows, looking into the two outer court-yards, are protected by iron gratings. The front and sides of the houses facing the streets, where not blank walls, are divided into small rooms, and let out as shops. In the centre of the city is the *Plaza*, or great square, occupying an entire quadra. On its NW. side are the directorial mansion, the palace of government, the prison, and the chamber of justice; on the SW. side stand the cathedral and the old palace of the bishop, now occupied by the *estado mayor*; on the SE. is a range of shops, with an arcade in front; and the NE. side is composed of private residences. All these buildings, except the cathedral, are of brick, plastered and whitewashed. The palace is by far the best edifice as to its architecture: it consists of two stories, inclosing a large open quadrangle; the lower story comprises the armoury and treasury, and the upper story the great hall of audience and the ministers' offices. The cathedral is the only stone edifice in Santiago; it is constructed of limestone quarried in the Chimba suburb: its design is of the better order of Moorish architecture. In the centre of the square is an ornamental fountain, furnished with water by a subterranean aqueduct. The city is mostly supplied hence with water for drinking, which is conveyed in barrels of 10 gallons each, two of which are a mule's load, and sold for *5d.* a barrel. The largest public building, and that most admired by the natives, is the mint. It occupies an entire quadra, and, like the private houses, consists of a variety of offices arranged round three quadrangular courts. Its front, facing the street in which it is situated, presents a series of heavy pilasters, supporting a rude cornice and a ponderous balustrade, and having in its centre a large arched portico. The entire edifice is of plain brick, and was, like the other public buildings, constructed by bricklayers sent out from Spain for the purpose. The consulado, a spacious plastered and whitewashed structure, in which the commercial tribunal, senate, and national congress meet, the custom-house, and the handsome little theatre are worth notice. The city and suburbs are divided into 5 parishes. All the parish churches are mean; but not so those of the conventual establishments, which are numerous. One of the Jesuits' convents has been converted into a national college, and another is used for the public library and printing-office. The library contains several thousand printed vols., and some curious MSS. relative to the Indian tribes.

Santiago has 3 markets: the principal is holden in the Bassoral, a large open space at the foot of the bridge, and is tolerably well supplied with meat and vegetables. The other markets consist of mere movable stands at either end of the Cañada; but meat, kitchen vegetables, fruits, and other requisites, are continually hawked about the streets on horses or mules, which precludes the necessity of sending to the markets. Fodder for horses is hawked about in a similar manner; and large quantities of lucerne are daily brought into the town, horses being kept by nearly every family. The horses of Santiago are generally well broken, and are more docile than those of Buenos Ayres. Most part of the adjacent country is devoted to the rearing of live stock; but, when cultivated, it produces good crops of wheat, the soil being excellent, and irrigated by many subterranean springs. The climate, were it not for the dreadful visitation of earthquakes, would be delightful; and, from its comparative coolness, European vegetables may be raised in great perfection. The vine is grown, and wine of good quality might be made if its manufacture were properly understood. In the outskirts of Santiago are numerous handsome *quintas* or villas, and the approaches to the city are mostly through lanes bounded by walls inclosing extensive vineyards and orchards, which yield a large revenue to their proprietors.

Santiago occupies the site of a previous Indian settlement; it was founded by Pedro de Valdivia in 1541. It has frequently suffered from earthquakes; but, with other towns of the interior of Chili, it escaped the catastrophe which destroyed Valparaiso and Concepçion in 1835.

JAMAICA (Nat. *Xaymaca*), one of the Greater Antilles, and the largest and most valuable of the West Indian islands belonging to Great Britain. It lies in the Caribbean Sea, between lat. 17° 44′ and 18° 30′ N., and long. 76° 12′ and 78° 25′ W., about 100 m. S. Cuba, and 120 m. W. Hayti, from which it is separated by the Windward Channel. Shape nearly oval; greatest length, E. to W., 150 m.; average breadth, about 41 m. Area 6,400 sq. m.; pop. 441,264 in 1861, of whom 213,521 males, and 227,743 females.

The Blue Mountains, a lofty range, run through the island in its whole length, rising in some places to upwards of 7,200 ft. in height. On the N. and S. sides of this range the aspect of the country is extremely different. On the former the surface rises gradually from the shore by undulating hills, separated by spacious valleys, watered by numerous rivulets, and clothed with pimento groves. The scenery on the S. side is much bolder. The shore is skirted by abrupt precipices and inaccessible cliffs; and the hill ranges towards the interior are more abrupt and less fertile. Between these ranges and the foot of the central chain are extensive savannahs, and wide plains cultivated with sugar-cane, the luxuriant beauty and verdure of which is set off by a boundless amphitheatre of forest—

> 'Insuperable height of loftiest shade,
> Cedar, and branching palm.'

The outline of the forest melts into the distant blue hills, and these again are lost in the clouds. The island is well watered. There are about 100 streams dignified with the name of rivers, but none of them are navigable except for boats. Black River, which debouches on the SW. coast, the largest, is only available for flat-bottomed boats and canoes for about 30 m. Like all the other streams, its current is very rapid.

From the geographical position of the island, so near the equator, the climate in the low grounds is necessarily very hot, with little variation throughout the year; the days and night are, for the same reason, nearly of equal duration, there not being more than two hours difference between the longest day and the shortest. The medium temperature of the year near Kingston ranges between 70° and 80°; but little differences of elevation have here a great effect over the temperature and the salubrity of the climate. At about 4,200 ft. above the level of the sea, the temperature usually ranges between 55° and 65°; in the winter it falls even as low as 44°. There the vegetation of the tropics disappears, and is supplanted by that of temperate regions. Showers are common in the interior almost throughout the whole year, but they do not fall with the same violence as in the plains, and the quantity of rain appears to be less. The air is exceedingly humid, subject to dense fogs, and those rapid alternations of temperature peculiar to all mountain regions. While the pestilence of yellow fever rages in the low grounds, and along the coast of this island,

Digitized by Google

cutting off its thousands annually, these elevated regions enjoy a complete immunity from its effects; for the plague has never been known, in any climate, to extend beyond the height of 2,500 ft. The inhabitants are said to enjoy a degree of longevity rarely attained in other countries. The N. side of the island is more healthy than the S.; but all insalubrity is supposed to cease at an elevation of 1,400 ft. The mid-day heat is, during most part of the year, greatly modified by an invigorating sea-breeze, called by Europeans the *doctor*, which sets in from 8 to 10 o'clock in the morning, increases in force till about 2, and declines with the sun, till, on the approach of evening, it is succeeded by the land wind from the mountains. When these winds become less regular, or altogether fail, as is sometimes the case before the rainy season, the atmosphere is exceedingly oppressive. The year is divided into a short wet season, which begins in April or May, and lasts about six weeks; a short dry season, from June to August; a long wet season, comprising Sept., Oct., and Nov.; and a long dry season, which occupies the remaining four months, during which the weather is serene and pleasant, being comparatively cool. The annual fall of rain is nearly 50 in.; the amount has become less in proportion as the forests have been felled. More rain falls on the N. than the S. side of the island, and the average temperature is lower. The principal towns and military stations are on the S. side. Fevers, dysenteries, and diseases of the lungs or brain, are the most fatal. Fevers of a remittent character are more prevalent than in any of the other British stations in the W. Indies. Earthquakes are frequent, and sometimes violent; in 1692 the town of Port Royal was submerged several fathoms beneath the ocean by a catastrophe of this kind. Hurricanes mostly occur between July and October; and though not so frequent as in the windward islands, they are sometimes most destructive. One of the most appalling of these visitations took place on the 3rd of October, 1780. On this occasion the little sea-port town of Savannah-la-Mar, on the SW. coast of the island, was completely destroyed. During the tremendous conflict of the elements the sea burst over it with irresistible fury, and in an instant swept into its abyss its inhab. and their houses, leaving behind no vestige of either. Several hurricanes have occurred since, but happily none of them have had such frightful consequences. Jamaica contains no active volcano; but the traces of former volcanic action are sufficiently obvious. Micaceous schist, quartz, and rock spar are common; but limestone, containing numerous shells, is the most prevalent geological formation. The island contains argentiferous lead, copper, iron, and antimony ores; and the Spaniards are reported to have wrought both copper and silver mines. Mining industry is now, however, quite extinct.

The turf-clad hills on the N. side of the island are chiefly composed of a chalky marl; elsewhere the soil is frequently of a deep chocolate colour, or a warm yellow or hazel. The latter, called the Jamaica *brick mould*, retains a good deal of moisture, and is among the best adapted for the sugar-cane throughout the West Indies. But though the soil be in some parts deep and fertile, Jamaica is not generally productive, and requires both skilful labour and manure to make it yield heavy crops. Indigo, cotton, and cocoa were formerly important staples; but these have mostly given way to other articles. Maize, Guinea corn, and rice are the principal grains cultivated; the latter, however, is not raised in great quantities. Maize yields two, and sometimes three, crops a year, of from 15 to 40 bushels the acre. Calavances, a species of pea used by the negroes, the kinds of pulse and other garden vegetables common in Europe, thrive well in the mountains; and the markets of Spanish Town and Kingston are abundantly supplied with these, as well as native pot-herbs, of excellent quality. The plantain, banana, yam, cassava, and sweet potato are indigenous; the first named is the principal support of the coloured population.

Few countries offer so fine an assortment of tropical fruits. Among these is the bread-fruit tree, from Otaheite, originally introduced by Sir Joseph Banks. The orange, lemon, lime, vine, melon, fig, and pomegranate are met with, having probably been introduced by the Spaniards; and many other European fruits succeed in the cool mountain region. The sunflower is an article which has recently begun to be cultivated for its oil. Cinnamon has been naturalised in Jamaica; and the forests abound with dye-woods and guniacum, iron-wood, brazilletto, mahogany, greenheart, and other valuable kinds of timber, and woods fit for cabinet work. Various kinds of grasses are cultivated; the principal is Guinea grass, a product of so much importance, and growing so luxuriantly, that the grazing farms are for the most part covered with it. Horned cattle are excellent, and better or cheaper beef is not met with in any part of Europe. Oxen or mules are used for farm labour. Horses—an active and hardy breed—are reared for saddle and harness. Sheep, goats, and hogs are numerous: the latter are of a small breed, but their flesh is very good. Poultry and pigeons are kept in great numbers. The Europeans found many indigenous quadrupeds on the island, but none worthy of notice now exist, except the agouti, some monkeys, and rats, which last are in such immense numbers, and so destructive of the sugar-canes, that from 8 to 10 per cent. per annum of the sugar crop, while standing, is supposed to be destroyed by them. Great numbers of wildfowl are met with; and rice birds, esteemed great delicacies, visit the island in large flocks in October. Alligators inhabit some of the larger rivers, and many varieties of lizards and snakes are found, some of which are used as food by the natives. The mountain crab of Jamaica is highly prized. These singular animals come down by millions from the mountains to the sea, to deposit their spawn, from Feb. to April, and return to their original habitations by the end of June.

The emancipation of the slaves had a great, and, for the moment, a disastrous effect upon the state of agriculture in Jamaica. From the passing of the Slave Emancipation Act, in 1832, till the year 1848, no fewer than 653 sugar and 456 coffee plantations were abandoned, and their works entirely broken up. After their emancipation, the blacks, who were formerly provided with lodgings and a piece of ground rent-free, had to pay rent for them; and a good deal of dissatisfaction arose from the manner in which this rent was charged under the new system. In some cases it was estimated, not according to the real worth of the premises, but according to the number of persons deriving subsistence from the land, so that the man with the largest family became liable to the heaviest rent. In order the better to command the services of the occupiers, the planters refused at first to give them leases, and stipulated that they might be ejected even at a week's notice. But this plan defeated its own object, both by making the former bondsmen inattentive to the culture of grounds held on so precarious a tenure, and by making them extremely anxious to acquire

Digitized by Google

the property of a small piece of land. Subsequently, the plan of fixed rents, unconnected with labour, was adopted, with better result, though not eradicating, by any means, the great source of dissatisfaction of the freed negroes—that of being mere labourers, instead of owners of the soil.

The discontent of the coloured population, aggravated in many instances by the harsh treatment of the whites, who here, as elsewhere, exhibited an excessive arrogance and pride of race, led to an insurrection in the month of November, 1865. It was suppressed in blood, several thousands of the unfortunate outcasts suffering death by being hung or shot; while many others, not a few entirely unconnected with the outbreak, were flogged with wire cat-o'-nine-tails, and otherwise treated in the most cruel manner. But these atrocities had the good effect of arousing public opinion in England, and after a lengthened investigation of the state of affairs in Jamaica, undertaken by a special commission sent out by the British government, great and sensible reforms were introduced in the administration of the colony.

It has been attempted to obviate the deficiency in the supply of labour, by importing free labourers from India and Africa. But the former have been found to be quite unsuited to the demands of the country; whereas the latter, so long at least as they are unable to find the means of supporting themselves otherwise, make serviceable labourers. In recent years, therefore, the importation of such labourers has been continued only on a small scale. The numbers brought to Jamaica in the year 1862 were, according to official returns, as follows:—

Places from which embarked	Number of Coolies	Number of Africans
Calcutta and St. Helena .	2,000	138
St. Helena	—	470
Total . .	2,000	608

The rate of wages at Jamaica is comparatively high, amounting to from 1*s.* 6*d.* to 1*s.* 9*d.* a day for agricultural labourers, and from 3*s.* to 6*s.* per diem for handicraftsmen, according to returns of 1862.

The products raised for exportation, more especially sugar, are the chief objects of the industry of the colonists; and the greatest efforts have been made, by the introduction of machinery and otherwise, to obviate the drawbacks under which they have latterly been placed. The estates on the high grounds, called 'pens,' are kept almost entirely in pasture, to supply the sugar and coffee estates with horned cattle, horses, and mules. The culture of corn and other grain, with the exception of maize, has hitherto been confined within narrow limits. The following table, which gives the quantities and value of the principal articles of colonial produce exported in each of the years 1861 and 1862, shows the agricultural and industrial state of Jamaica at the present time:—

Principal Articles	Quantities		Value	
	1861	1862	1861	1862
			£	£
Coffee . lbs.	6,715,581	5,474,575	151,061	126,857
Ginger . ,,	617,231	933,045	12,208	18,142
Pimento ,,	6,647,503	4,916,285	53,126	38,633
Rum . galls.	1,896,934	1,831,712	316,906	243,827
Sugar . cwts.	654,848	615,083	595,084	563,474
Wood: Log-wood . tons	19,425	33,268	32,553	64,299
Total Value of principal and other Articles . .			1,214,614	1,113,442

The total value of the imports and exports of the years 1861 and 1862, and their division among various countries, is given in the following table:—

Countries	Imports		Exports	
	1861	1862	1861	1862
	£	£	£	£
United Kingdom	606,244	603,081	1,045,480	925,829
British Poss.:				
India . . .	12,838	11,240	—	—
N. America .	169,509	176,925	5,899	5,381
West Indian .	3,159	3,641	8,149	12,490
African . .	34	—	103	—
Honduras . .	957	—	1,949	321
United States .	285,108	330,495	91,676	97,230
Hanse Towns .	2,664	6,829	37,710	49,839
Portugal . . .	—	—	—	—
New Granada .	3,162	1,939	12,656	6,418
Venezuela . .	108	221	268	—
Dutch W. Indies	447	848	—	—
Danish ,,	1,304	1,403	181	1,746
Spanish ,,	3,820	3,393	2,824	1,669
French ,,	129	1,567	10,248	3,306
Mexico . . .	—	402	—	9,213
Guatemala . .	—	—	491	—
Total . .	1,089,483	1,141,984	1,214,614	1,113,442

The principal ports (all of which are free) are Kingston, Ports Royal and Morant, Black River, and Savanna-la-Mar on the S. coast; and Lucea and Montego Bay, Falmouth, St. Ann, Ports Maria and Antonio, and Annotto Bay, on the north.

Jamaica is divided into three counties; Middlesex in the centre, Surrey in the E., and Cornwall in the W. These are subdivided into twenty-two parishes, ten of which are comprised in the first, seven in the second, and five in the third named co. St. Jago de la Vega, or Spanish Town, is the seat of government; but Kingston is the largest town, and the real cap. of the island. The executive power is vested in a governor, appointed by the crown, aided by a council of four members, appointed in like manner. The legislative power, previous to the revolt of 1865, was vested in a house of assembly, of forty-seven members, three being elected by each of the parishes containing the towns of Kingston, Spanish Town, and Port Royal, and two by each of the other nineteen parishes. The executive power was greatly strengthened, and the legislature reduced in influence, after the events of 1865. The house of assembly had formerly the power of originating as well as appropriating grants of money; but this was abolished in 1854, and no grant now can originate in the assembly except by message from the governor, or through the executive committee; which committee consists of one member of the legislative council and not exceeding three members of the assembly, not office-holders, chosen and changed at pleasure by the governor. The salary of the governor is 5,000*l.* a year. Justice is administered in a supreme court, composed of the chief justice and two puisne judges, which sits three times a year at Spanish Town. Courts of assize are holden three times a year in each county. Inferior courts of common pleas decide in causes to the value of 20*l.* with costs, and justices of the peace in those not above 40*s.* The court of chancery was formerly held by the governor only; but, in Lord Metcalfe's time, a vice-chancellor was appointed, with a salary of 2,500*l.* a year, who transacts all the ordinary judicial business of the court. Appeal is made from the court of chancery to the privy council. There are, also, admiralty and other special courts. Since the emancipation of the slaves, *courts of conciliation*, similar to those

Digitized by Google

established in Denmark and some other countries, have been instituted in various parishes. The coloured pop. are frequently members of these tribunals, and are thus accustomed to the discharge of some of the most important social duties. Submission to their decisions is optional; but there, as elsewhere, they are usually acquiesced in. A police force, of upwards of 400 constables, was established in 1840.

The military force usually amounts to about 2,000 regular troops, exclusive of the insular militia, which is at present in a very reduced state. The public expenditure on account of religious establishments amounted to 29,133*l.* in 1862, the Presbyterian and R. Catholic clergy besides the church being salaried by the government. Nearly 13,000*l.* —12,884*l.* in 1862—are spent yearly on public instruction and charitable institutions. Education is widely diffused. Numerous schools and churches have recently been established; and the emancipated pop. have not been slow to avail themselves of the benefits resulting from the institution of savings' banks. The public revenue, in 1862, amounted to 291,088*l.*, and the expenditure, in the same year, to 292,402*l.* The compensation money awarded to the proprietors for the liberation of the slaves, in 1833, amounted to 6,161,927*l.*, the average value of a slave from 1822 to 1830 having been 44*l.* 15*s.* 2*d.* The ordinary currency of the United Kingdom has been adopted in Jamaica.

Jamaica was discovered by Columbus in 1495, and was settled in 1503. It remained in the possession of Spain till 1655, when it was taken by the English, to whom it has since belonged.

JANEIRO. See RIO DE JANEIRO.

JAPAN (EMPIRE OF), called *Niphon* by the Japanese, and Yang-hou by the Chinese; an insular empire of the E. coast of Continental Asia, and opposite to the sea of Japan and the gulf of Tartary and Corea, from which it is separated by Manchooria. It comprises five large and a great number of small islands, lying between the 30th and 50th parallels of N. lat., and between the 128th and 151st degrees of E. long.; bounded N. by the sea of Okotsk and the independent part of the island or peninsula of Tarakai, or Karafto (formerly known to English geographers as Saghalien); by the N. Pacific Ocean; S. by the eastern sea of the Chinese; and W. by the sea of Japan, which communicates with the open ocean by the straits of La Perouse and Sangar, running between the different islands. The present knowledge of Japan is very unsatisfactory: the cautious and jealous policy of the Japanese government with respect to the admission of foreigners (caused, as in China, by the attempts of Jesuit missionaries to christianise the country), has hitherto, in a great measure, baffled the efforts of European inquirers into its internal arrangements and economy. The total area is estimated at 152,604 sq. m., with a pop. of from 35,000,000 to 40,000,000.

Physical Geography.—The three principal islands of Japan Proper have a very uneven surface, few plains being of any great extent, and the hilly country extensive and of a rocky character. Niphon, the largest, longest, and best known of these islands, contains a regular mountain chain, running NNE., the highest summit of which, called *Fusi*, is upwards of 12,000 ft. high, another also (*Siro-jama*) reaching an elevation of 8,000 ft., and being covered with perpetual snow: the average height, however, is so moderate, that the high ground generally admits of cultivation almost up to the dividing line of the watershed. The summits above named are active volcanoes, and many other hills emit either flames or smoke. Earthquakes are frequent, one in 1705 having destroyed nearly half of Yedo, and killed more than 100,000 of its inhab.; thermal and mineral springs also are of very frequent occurrence, so that, on the whole, the islands of Japan may be considered the seat of great volcanic movements, connected, most probably, with those of Kamtschatka and the islands of Formosa and the Asiatic Archipelago, all of which belong to a chain of heights almost as distinctly marked as the volcanic chain of America. The metallic riches of Japan are stated to be very great, comprising copper in sufficiently large quantities for an extensive exportation, a considerable quantity of sulphur, some lead, tin and iron, and a little gold and silver, the mines of the last two being under the exclusive superintendence of the government. The rivers of Japan, though numerous, are not long, on account of the peculiar narrowness of all the islands: few of them are navigable, and most might be characterised rather as torrents than rivers. The largest is the Yedo-gawa, in Niphon, rising in the large lake Oitz, or *Biwa-no-oumi*, and emptying itself, after a probable course of 60 or 80 m., into the harbour of Osaka. The lake Fakonee, SW. of Yedo, is treated with superstitious reverence by the natives. The climate in a country extending over so many parallels of lat. must, of course, vary extremely, the N. dependencies having a severely cold climate, while the S. parts of the empire are nearly as warm as the S. of France, though with a temperature considerably more variable, owing to their insular condition. In Kiu-siu and the S. parts of Niphon, as far N. as Yedo, the thermometer ranges between 104° and 29° Fahr., 80° being the average height in the middle of summer, and 35 during the severest months of winter. The winter cold, however, is much increased by the prevalence of N. and NE. winds; and the summer heats of July and August are moderated by cooling breezes from the S. and SE. Rain is very frequent, falling more or less on two-thirds of all the days in the year, but more especially in June and July, which are the *satoaki*, or rainy months: hurricanes, also, and storms frequently occur, and are described as being very violent.

Agriculture.—Tillage is followed in Japan, not merely as a pursuit dictated by private interest, but also in obedience to a general and very peremptory law, which obliges all owners of land, under the penalty of confiscation, to keep their property in good productive condition, and therefore able to pay a large land-tax to government or its officers. The soil, though not naturally fertile, has been so much improved as to be rendered extremely productive. Few plants, except on the hills, are found in a natural state; and the face of the country, even on the mountain sides (which are formed into terraces, as in some parts of Italy and Persia), is so diligently cultivated, that it would be difficult to find in the country a single nook of untilled land, even to the dry summits of the mountains. In the S. district rice is raised in very large quantities, as it forms a principal article of food with the inhab.; but wheat is little grown and held in light estimation; barley, also buckwheat, a bean called *daidson*, and another, the *soja dolichos*, potatoes, melons, pumpkins, and cucumbers, are raised in great abundance; and the fruit trees of S. Europe, the orange, lemon, vine, peach, and mulberry (the last of which is carefully reared for silk worms), are both plentiful and highly productive. Ginger and pepper are the chief spice plants. Cotton is cultivated in considerable quantities, and tobacco, introduced by the Jesuits, is very generally raised in the S. islands. The grand object of cultivation, however, next to rice, is the tea-plant, brought here from China in the

Digitized by Google

9th century. Not only are there large tea-plantations with dyeing-houses, but every hedge on every farm consists of the tea-plant, and furnishes the drink of the farmer's family and labourers. The finer sorts demand extreme care in their cultivation: the plants thrive best on well-watered hillsides, and they are said to be manured with dried anchovies, and a liquor pressed out of mustard-seed. Among trees, the *Broussonetia papyrifera* is cultivated for its bark, which is converted into cloth and paper; and the varnish tree (*Rhus vernix*, and called *ocrosino-ki* by the natives), for its gum, used in varnishing wooden furniture; the camphor laurel, also, the iron tree, the oak, fir, and cypress are common, and furnish products useful as well for home consumption as for exportation. Of timber, however, there is an insufficiency, and supplies are obtained from the N. dependencies of Jesso and Saghalien. The plants are extremely beautiful, and many of them, as the *Clerodendron*, *Camelia*, and *Pyrus*, have been naturalised in Great Britain.

Animals.—Pasturage in a country inhabited by a people eating scarcely any animal food except fish, and so well supplied with cotton and silk that they feel no want of wool for the manufacture of clothes, must necessarily be very unimportant. Buffaloes and oxen are not numerous, and are used only for draught labour, and there are but few sheep, the progeny of a breed introduced by the Dutch soon after their settlement in Japan: the horses are of inferior size, and are only used by the nobility; there are neither mules nor asses, and pigs are found only in the neighbourhood of Nagasaki. Dogs are common, and are considered sacred animals, in consequence of the favour which they enjoyed from one of the *Mikados* or supreme emperors; and cats are even more esteemed, if possible, by the Japanese ladies than by the venerable spinsters of Great Britain. Among the wild animals, may be enumerated bears, wild boars, foxes, wild dogs, deer, monkeys, hares, rats, mice, and two small animals of the weasel kind peculiar to the country, and called the *itutz* and *tin*. Birds are numerous and of many varieties: falcons are highly valued, and pelicans, cranes, and herons are considered useful in destroying vermin and insects that are injurious to the interest of agriculture: the pheasants, ducks, and wild geese have splendid plumage; besides which there is a great variety of teal, storks, pigeons, ravens, larks, and other small birds. Among reptiles, snakes are not unfrequent, especially in the N. part of Niphon, and one variety, the *Ouvabami*, is of enormous size: tortoises also and lizards are of common occurrence; and the islands, particularly towards the S., abound with noxious insects, scorpions, centipedes, and white ants. An apterous phosphoric insect (*Lampyris japonica*) deserves notice as being similar in its habits to the fire-fly of America, but of an entirely different genus. The seas contain large quantities of fish, affording a main article of food to the inhabitants, and giving employment to numerous fishermen. The salmon, herring, cuttle-fish (*Sepia octopodia*), eel, perch (*Sciana japonica* and *Callionymus japonicus*), with many others, are caught in great quantities: oysters, also, of a peculiar and delicious kind, are extremely abundant, and are used almost exclusively as food by many of the poor inhabitants about Yedo, where the fisheries lie. Whales and narwhals frequently visit the coast, and are caught by harpooning; the flesh is eaten, the whalebone serves various purposes, and ambergris is extracted from the entrails.

Manufactures.—The industry of the Japanese will bear to be compared with that of the Hindoos, or even Chinese. The artificers in copper, iron, and steel have a high character, and the swords of Japan rank second only to those made in Khorassan. Telescopes, thermometers, watches and clocks, of good quality, are constructed at Nagasaki, and many of the workmen possess a high degree of mechanical ingenuity. Glass is made; but the natives are not acquainted with the art of glass-blowing. Printing was introduced in the 13th century, and is conducted, as in China, by means of wooden blocks: engravings also are made, but in a very clumsy manner. Silk and cotton fabrics, of good quality, are manufactured in quantities almost sufficient for the consumption of the population. Porcelain, more highly esteemed even than that of China, is formed from two peculiar kinds of earth, called *kaslin* and *petunsee*. The art of lacquering furniture with gold, silver, and various pigments, the secret of which was till lately almost exclusively confined to the Japanese, and hence called 'japanning,' is practised with great success; and some of the finest specimens that have reached Europe, and are deposited, with other curiosities, in the Royal Museum at the Hague, exceed in excellence every other sort of japanned wares known in Europe. The process is extremely tedious, and the gum requires long preparation for its conversion into varnish. Five coats, at least, are successively applied, and when dry, rubbed down and polished with stone; many of the more costly specimens are inlaid with mother-of-pearl. Good paper is made from the maceration of the mulberry and other barks, the fibres of which are used in the manufacture of cordage. The art of building houses is little understood: they are almost universally constructed of timber, covered on the outside with plaster, and the insides consist usually of two stories, each of which, when divided, is parted off into close rooms by flimsy paper partitions, adorned, or rather disfigured, with garish and bold paintings. Of ship-building and navigation the Japanese have a slight knowledge; and that is prevented from increasing by a law, which compels the people to build their ships in a particular fashion, somewhat similar to that of the Chinese junks. They are made of cedar, fir, or camphor-wood, and the merchant vessels average about 70 ft. in length, by 20 or 24 ft. in breadth, their burden varying from 100 to 150 tons. Great numbers of ships are employed in trading with the different ports of the empire, and many others besides are engaged in fishing.

Trade and Commerce.—The internal trade of Japan is very extensive, and a variety of regulations are in force, the object of which is to protect and encourage home industry. The prices of goods are not enhanced by imposts of any kind; and communication between the great markets and all parts of the empire is facilitated by numerous coasting vessels and well maintained roads. The shops and markets, especially in Yedo, Miako, and Nagasaki, are well provided with almost every description of agricultural and manufactured produce, and the great fairs are crowded with people from the most distant parts of the country. Accounts also are published, from time to time, of the general state of trade and agriculture, and of the prices current for the chief articles of traffic at the trading towns of Yedo, Miako, Osaka, and Simonoseki on the island of Niphon, Sanga, Kokoura, and Nagasaki in Khu-siu, Tosa in Sikokf, and Matsmai in Jesso. Foreign commerce, however, was, until recently, vigorously opposed by the government, in consequence of the attempts of the Jesuit missionaries to christianise the people. An edict, published in 1637, and still in force, makes it a capital offence for the natives to

Digitized by Google

travel into other countries; and their seamen even, when accidentally cast on foreign shores, are, on their return, subjected to rigorous examination, and sometimes tedious imprisonment, to purify them from the supposed pollution contracted abroad. The Dutch, who were the first permitted to visit the empire after the expulsion of the Portuguese, had their earliest factory on the island of Firato: but they were removed, in 1641, by the emperor's orders, to Nagasaki, where, in common with the Coreans and Chinese, they are allowed to bring their goods for sale; but the number of vessels allowed to come each year, and the quantity of each description of wares to be sold, were strictly defined; and the residents in the factory restricted to 11 only. The ships, immediately on their arrival, were minutely searched, and the crews kept, during their stay in port, completely secluded from the natives, on the small island of Djesima, close to the harbour. In recent years, the combined efforts of the European and American governments has brought about a more liberal state of things. By treaties made with several European governments—with Russia in October, 1857, and with Great Britain, France, and the United States in July and August 1858—the three Japanese ports of Nagasaki, Kanagawa, and Hakodadi were thrown open to foreign commerce. At the last-named port, commercial intercourse was attempted in the years 1859–60, but did not succeed. The total value of imports at the port of Nagasaki in the year 1862 amounted to 149,326*l.*, and of exports to 217,314*l.* Of greater commercial importance than the foregoing is the port of Kanagawa, at present the chief station of commercial intercourse with Japan. The following return shows the amount of trade carried on at the port of Kanagawa during the year ending December 31, 1862:—

IMPORTS.

In 121 vessels—	Dollars
By British merchants (including two German firms)	1,575,734
By French merchants (including one German firm)	20,783
By American merchants	122,836
By Dutch merchants (including two German firms	857,577
Total	2,576,930
	£536,860

EXPORTS.

	Dollars
By British merchants	4,707,384
By French merchants	337,271
By American merchants	314,627
By Dutch merchants	945,846
Total	6,305,128
	£1,313,568

The imports comprise raw silk, woollen, cotton, and linen cloths of various kinds, sugar, dye-woods, seal-skins, pepper, and other spices, quicksilver, tin and iron, cinnabar, glass-wares, &c. from the Dutch, and silk, tea, sugar, dried fish, and whale oil from the Chinese: the exports consist chiefly of copper ingots, camphor, and, to a smaller extent, of silk fabrics, lacquered wares and porcelain.

The number of foreigners settled in Japan is as yet very small. At the end of the third year that the ports had been opened, the foreign community at Kanagawa consisted of fifty-five natives of Great Britain; thirty-eight Americans; twenty Dutch; eleven French; and two Portuguese: and in the latter part of 1864 the permanent foreign residents at Kanagawa had increased to 300, not counting soldiers, of which number 140 were British subjects, and about 80 Americans and 40 Dutch. At Nagasaki, the number of foreigners at the same period was 39, with a greater proportion of Dutch. The port of Hakodadi, in the north of Japan, was deserted, after a lengthened trial, by all the foreign merchants settled there, it having been found impossible to establish any satisfactory intercourse with the natives.

Accounts are kept in *thails*, each of which is equivalent to 3½ Dutch florins, or 5*s.* 10*d.* Eng. money, and the thail is composed of 10 *mas*, and the mas of 10 *condorins*. The gold coins are the *itzib*, worth 15 mas (or 8*s.* 9*d.*), the *kobang*, equal to 64 mas (1*l.* 7*s.* 4*d.*), and the *oban* valued at 3 kobangs. Large payments, however, are most commonly made in silver ingots of a fixed weight and value. The standard of weight is the Japanese *picul*, equal to 130·9 English lbs. avoirdupois, and divided into 100 *cattys* and 1,600 *taels*. The measure of length is the *tattamy*, equivalent to 6 ft. 4 in. English; but road distance is reckoned by *ri*, or Japanese leagues, about 30 of which go to a degree of latitude.

Government and Laws.—The government of Japan is an hereditary, absolute monarchy. The supreme power was originally vested in an ecclesiastical emperor, called *Daïri-sama*, or *Mikado*; but in 1583 Joritomo, the emperor's *Sjogûn*, or military commander, usurped the chief civil power, and from that time to the present, notwithstanding its acknowledged illegality, the mikado, who is the only real emperor, has been a mere puppet-king, in a state of dependence on his sjogûn, his first officer, and the military chief of the empire. All enactments, however, must have the sanction of the emperor before they have legal force; he alone confers honorary distinctions on the sjogûn and the nobility, and he has the entire superintendence of religious affairs and education. Any further connexion with sublunary affairs would, it is supposed, degrade the Son of Heaven, and profane his holy character. His court is at Miako, where he lives secluded in a large palace, and surrounded by numerous officers, who treat him with almost divine honours. His person is considered too sacred to be exposed to the air, and the rays of the sun, and still less to the view of his subjects; and he is consequently confined within his palace: his hair, nails, and beard are not cleaned or cut by daylight, these operations being always performed when he is asleep; he never eats twice off the same plate, nor uses any vessels a second time; and they are invariably broken to prevent them from falling into unhallowed hands. The mikado's finances, however, are now restricted to the taxes collected from Miako and the surrounding territory, certain revenues from the treasury of the sjogûn, and the fees paid on the admission to honourable dignities and offices. His income, indeed, is so small, and the number of dependents so great, that he may be said to live in splendid poverty. The sjogûn, who has usurped all the substantial power, holds his court at Yedo, and exercises entire authority over the lives and property of the natives, controlled only by the laws enacted by former emperors, and which admit of little change. To him, also, directly belongs the local government of the five great towns, Yedo, Miako, Osaka, Sakai, and Nagasaki. The country is divided into 8 districts, which are subdivided into 68 provinces, and these again into 604 counties: the provs. are governed by princes called *daimio* or high-named; and under them are governors of districts, called *siomio*, or well-named. The daimios are appointed by the sjogûn, to whom they are accountable, with hostages for the proper exercise of their authority. They are entitled to the revenues of their respective provs., which

Digitized by Google

enable them, besides maintaining their state and dignity, to keep an armed force for the preservation of order, and to make outlays in repairing roads, and other public works. They reside usually in large towns, either maritime or situated on rivers, and their castles are defended by strong gates and lofty towers. Once a year, in token of subjection, they repair to the sjogûn's court at Yedo, attended by numerous and splendid retinues, and bearing valuable presents, constituting a main portion of his yearly revenues. The executive department is confided to seven ministers, who undertake severally the departments of internal economy and finance, commerce and navigation, public works, police, civil and criminal legislation, war and religion. The supreme judicial council, called gorondje, is composed of 5 daimios, who assist the kubo in his decisions on political offences; and a senate of 15 daimios or nobles forms a subordinate court, that takes cognisance of civil and criminal cases.

The laws of Japan are severe, and even sanguinary; fines are seldom imposed, and exile to the penal settlement of *Taitse-en-sima* (inflicted on the nobles), banishment, imprisonment, torture, and death by decapitation, or impaling on a cross, are the ordinary penalties of crime, the shades of which are little distinguished. It frequently happens, also, that the courts visit with punishment not only the delinquents themselves, but their relatives and dependents, and even strangers who have accidentally been spectators of their crimes. The prisons are gloomy and horrid abodes, containing places for torture and private executions, besides numerous cells for solitary confinement. The police is extremely strict, and in the large towns each street has a chief officer, called the *ottona*, who is responsible for the maintenance of order, the punishment of delinquents, and the registration of births, marriages, and deaths. Besides these, four superintendents regulate the economy of the towns, and rigorously punish, often with death, the most trifling infraction of public order or peace, information of which is obtained by an established system of *espionage*.

Revenues.—The public revenues are derived from taxes on land and houses. The land is assumed to be the property of the state, and is rated according to the class of soil to which it belongs; the rate being said always to exceed half and often three-fourths of the produce; but it is difficult to believe that so heavy a tax can be collected. Tenants neglecting the proper cultivation of their land are punished by ejectment. Houses are rated according to the extent of street frontage, and the amount in which the holders are mulcted is greatly increased by forced presents to the civil officers, and dues for maintaining the temples and idols. The amount of the kubo's revenues cannot be ascertained; but it may be inferred that the land-tax, and the contributions from the daimios, who farm the taxes of their 68 provs., must form a pretty large privy purse.

Armed Force.—The army in time of peace consists of 100,000 infantry and 20,000 cavalry; the force during war being increased by levies from the different provs. to 400,000 infantry, and 40,000 cavalry. The arms used by the infantry are the musket, pike, bow, sabre, and dagger; those of the mounted troops being the lance, sabre, and pistol. The artillery is confined to a few brass cannon and light pieces. The generals have no permanent office, but, in case of war or disturbance, are appointed by the sjogûn and princes. Discipline and fortifications are little understood; and their batteries consist usually of a few odd-looking walls, raised without either order or apparent object. Japan, though an insular dominion, has no navy; the ships, such as they are, being used in trade.

Religion.—The form of religious worship in Japan, especially the old form, has no resemblance whatever to any of the contemporary Chinese forms: the early inhabs. of Japan had a peculiar form, which, being respected as that of their ancestors, has maintained itself to this day, as well in the hut of the peasant as in the palace of the dairi. Being generally liked, it is not only tolerated, but even protected and venerated by government; even at the present time, it might have been the positive religion of the Japanese, if political causes had not obliged the subjects openly to acknowledge one of the sects of Buddh. The doctrines, views, and interpretations of the ancient rites of the Japanese worship are in no essential points similar to those of Buddh; and though, by contact of 1,000 years, they appear to have more or less amalgamated, yet they are kept rigorously distinct by Japanese theologians. The old religion is the *Sinsiu* (lit. *faith in gods*), or, according to Siebold, the *Kami-no-mitsi*, or way to the *kami*, or gods, the other being a modern Chinese term for it. This sect regards the founders of the empire to be sprung from *Ten-syoo-dai-zin*, the supreme deity, and to have descended from heaven upon the Japanese land; and their title *Ten-zi* is a recognition of their divine origin. The race is never extinct; for in case of a failure in the succession, a descendant is supposed to be sent from heaven (though in fact privately selected by the emperor from the families of the nobles) to the childless ten-zi. The spirit of their ruler is immortal, and this also confirms the faith of the people in the immortality of the soul, in connection with which they also believe in a future retribution of their good and evil deeds during life on earth. Their paradise is called *Takama-kahava*, and their hell *Ne-no-kuni*. The supreme deity is too great to be addressed in prayer, save through the mediation of the Mikado, the Son of Heaven, or of inferior spirits called *kami*, of which 492 were born spirits, and 2,640 are canonised mortals. For these *kami*, who seem to be regarded somewhat like the saints of the Romish calendar, as intercessors with God, temples are specially erected; and in every Japanese dwelling is a kind of oratory, in which the natives, morning and evening, offer their prayers to the supreme deity. Large gates and triumphal arches lead to the temples, which, with the dwellings of the priests and other buildings, frequently form extensive and stately edifices. Various eatables are offered as sacrifices to the kami, and anciently even human victims were immolated to reconcile the hostility of evil spirits. The priests of this sect are allowed to marry.

The Buddhist form of worship is supposed to have been introduced from China, through Corea, in the 6th century of the Christian æra; and the dogmas of that religion are divided into a higher and lower doctrine of faith. According to the first, man derives his origin from *nothing*, and therefore has no evil in himself; the impressions of the material world bringing out the evil in him, and fostering its growth. This evil is to be counteracted by following the bent of the soul, within which is neither more nor less than the deity guiding our actions. The human body having sprung from nothing, will, after death, return to nothing; but the soul survives, that of the wicked floating eternally in the void of space, while that of the good will repose in the palace of the deity, whence, if the denizens of this lower world should ever need the aid of a virtuous man, it will be sent from heaven to occupy another body. This is the esoteric doctrine of the priests, but which varies

Digitized by Google

from the more popular and practical tenets of the people. The common belief of the Japanese is that on the other side (*i. e.* in the other world), before the great judge *Emaoo*, stands a large mirror, in which the actions of all mankind are imaged forth. Near this mirror stand two spirits, who observe and report the deeds of every person, and a third records them in a book, by which the souls of the dead will ultimately be judged, and, according to their sentence, sent to their places of rewards and punishments. *Amida*, the saving deity, is the god of paradise; and the way to ensure a journey on the *Gokurak*, or road to paradise (one only out of six to which departed spirits may be sent), is an obedience to five commandments—viz. not to lie, not to commit adultery, not to kill any living creature, not to get drunk, and not to steal. One of the roads for the dead is *Tsikusyo*, the road to the hell of animals; and hence the Buddhists of Japan believe in the transmigration of souls into animals as well as men.

Of the religion of Buddh, as now professed, there are many ramifications, and much superstition prevails. *Jammabos*, or monks of the mountain, live a secluded and ascetic life; and blind monks, who deprive themselves of sight that they may not behold the vice around them, are very common throughout Japan. Occasionally, in pursuance of vows, men are met running about the street entirely naked, on a round of visits to different temples; multitudes of religious beggars also are to be seen with shaven heads; and singing girls, in the assumed habit of nuns, procure from the rich considerable sums. The sect of *Syuntoo*, which professes the morality of Confucius, is quite separate from any of the creeds above described, and has existed in Japan since A.D. 59. Here, as in China, its only object is the inculcation of a virtuous life in this world, without reference to an after-state of existence.

Population, Habits, and Manners.—The pop. of Japan are divided into eight classes, the princes, nobles, priests, soldiers, civil officers, merchants, artisans, and labourers either agricultural or otherwise. The caste system is strictly pursued, and each follows the employment of his fathers, whatever his talents may be for a different pursuit. The people, physically considered, appear to be a mixed breed of Mongolian and Malay blood, though they regard themselves as aborigines. They are, in general, well made, active, and supple, having yellow complexions, small deeply set eyes, short flattish noses, broad heads, and thick black hair, which, however, is not allowed to be worn except on the crown, the sides of the head being kept constantly shaved. The dress of the Japanese consists of several loose silken or cotton robes, worn over each other, the family arms being usually worked into the back and breast of that which covers the rest. To these is added, on state occasions, a robe of ceremony; and the higher classes wear with it a sort of trousers called hakkama (resembling a full-plaited petticoat drawn up between the legs), with one or more swords, according to the rank of the parties. The lower orders are prohibited from wearing swords. The men shave the front and crown of the head, the rest being gathered and formed into a tuft, covering the bald part: the women, on the contrary, wear their hair long, and arranged in the form of a turban, stuck full of pieces of highly polished tortoise-shell; and they paint their faces red and white, and stain their lips purple, and their teeth black. Hats are worn only in rainy weather; but the fan is an indispensable appendage to all classes of the Japanese. Their gait is awkward, owing partly to their clumsy shoes; but that of the women is the worst, in consequence of their practice of so tightly bandaging the hips, as to turn their feet inwards. On the other hand, they do not deform themselves by confining their feet in tight shoes, like the Chinese. Polygamy is not practised even by the nobles, and far more freedom is permitted to the female sex than in China: many are well educated, and almost all play on musical instruments. Concubines are kept in numbers, varying according to the means of the owner; but they hold a rank much inferior to that of wives: prostitutes are found in every town in greater numbers than in any country in Asia, except Hindoostan; and so little discredit is attached to their profession, that they are visited by married females, and received back without remark into respectable society.

The great bulk of the people appear intelligent, and desirous of increasing their knowledge by inquiries; they study medicine and astronomy, and their observations are as correctly made as their rude instruments will allow. Almanacks are compiled at Miako, the great centre of the national science and literature. The history of Japan has been written with great care by some of the native writers; and their works on botany and zoology contain good descriptions and tolerable engravings of the plants and animals indigenous to their islands. Poetry, also, is cultivated, and there is a prevalent taste for music. The Japanese language has no relation to the Chinese, nor, indeed, to any known Asiatic language, except that of the Ainos, who inhabit Jesso and Tarakai. It is a polysyllabic language, has an alphabet of 47 letters, and is written in four different sets of characters, one of which (the *katakana*) is used exclusively by the males, while another (the *kiragana*) is appropriated to the females. The Chinese character also is in use among the learned.

History.—Marco Polo was the first to make known to Europeans the existence of a country called by him *Zipangu*, but since proved to be identical with Japan. In 1542, Mendez-Pinto, a Portuguese, was cast by storm on these shores, and a Portuguese settlement from Malacca was soon after made at Nagasaki, the commercial relations of which, with the inhab., were very considerable and highly lucrative to the settlers, till the interference, in 1585, of Jesuit missionaries with the religious profession of the inhab., led to the persecution and final expulsion of the traders. The Dutch soon afterwards (in 1600), with great difficulty, prevailed on the Japanese to allow them to trade on condition of not interfering with the national religion; but the vexations and harassing regulations by which the trade was obstructed, and the very limited extent allowed to it, made it a matter of question how far the factory should be kept up by the Dutch government. The Russians tried subsequently to establish commercial relations with Japan; but their proposals were declined, and the envoys were ordered not to return on pain of death. Finally, in 1857, the combined efforts of the leading governments of Europe and that of the United States, were so far successful in opening Japan as to lead to commercial intercourse at the three treaty ports before specified. The results of the first eight or nine years of commerce have not, however, answered the expectation. The general belief is that the reluctance to intercourse with the Western nations is not to be found among the mass of the people, but solely in the ruling feudal aristocracy, the daimios.

JAROSLAVL, or YAROSLAV, a province, or government of Russia in Europe, chiefly between the 57th and 59th degs. of lat. and the 38th and

Digitized by Google

42d of long., having N. Novgorod and Vologda, E. Kostroma, S. Vladimir, and W. Tver. Length, N. to S., about 160 m.; greatest breadth nearly the same. Area, 13,800 sq. m. Pop. 976,866 in 1858. Surface almost wholly flat, in some parts marshy, and in general only moderately fertile. The Wolga traverses this government in its centre; the other chief rivers are its tributaries, the Mologa and Scheksna, which have, more or less, an E. direction. The lake of Rostof, in the S., is 8 m. long by 6 broad, and there are nearly 40 other lakes of less size. Rye, barley, wheat, oats, and peas, are grown, and the annual produce of corn is estimated at about three millions of chetwerts; a quantity insufficient for the inhab., who are partly supplied from the adjacent provinces by means of the Wolga. Its hemp and flax are excellent, and cherry and apple orchards are numerous. The gardeners of Jaroslavl and Rostof are famed throughout Russia, and many are met with at Petersburg. Timber is rather scarce. The rearing of live-stock, excepting horses, is little pursued; but the fisheries in the Wolga are important. The government is, however, more noted for its manufacturing than its rural industry. Linen, cotton, and woollen stuffs, leather, silk, paper, hardware, and tobacco are the principal manufactures; the peasants are almost every where partially occupied with weaving stockings and other fabrics, and making gloves, hats, harness, wooden shoes, and various rural implements. Commerce is facilitated by several navigable rivers and good roads.

Jaroslavl is subdivided into ten districts; chief towns, Jaroslavl, Rostof, and Ouglitch. Its pop. is Russian; and the women are proverbial (among Russians) for their beauty. Only about 1-17th part of the inhabs. reside in towns.

JAROSLAVL, a city of European Russia, cap. of the above gov., and of a circ. of same name, on the Wolga, at the mouth of the Kotorosth, 212 m. NE. Moscow, and 325 m. SE. St. Petersburg. Pop. 35,100 in 1858. The town is well built, though mostly of wood; and is defended by a fort at the confluence of the two rivers. In its broad main street, which is ornamented with trees, are many handsome stone houses; and 3 convents and numerous churches contribute to give Jaroslavl an imposing appearance. The Demidoff lyceum, founded in 1803, has a good library, a cabinet of natural history, a chemical laboratory, and printing-press, and ranks immediately after the Russian universities. It was originally endowed with lands, to which 3,578 serfs were attached, and with a capital of 100,000 silver roubles; and on the emancipation of the serfs, in 1863, it received a large pecuniary compensation. The same educational course is pursued as in the universities, and lasts three years. The establishment is placed under a lay-director and an ecclesiastic, and has 8 professors, 2 readers, and 40 pensionary students. Jaroslavl has also an ecclesiastical seminary, with 500 students. A large exchange (*Gostinŏi dvor*), an hospital, foundling asylum, house of correction, and 2 workhouses, are the other chief public edifices. This city is the residence of a governor, and the see of an archbishop. It has about 40 different factories, including 3 of cotton, 4 of linen, and 2 of silk fabrics, 8 tanneries, and several tobacco, hardware, and paper-making establishments. Its leather and table linen are much esteemed. The position of Jaroslavl on the Wolga contributes to promote its commerce, which is very considerable. Its manufactures are sent to Moscow and Petersburg, and a great many are sold at the fair of Markarief. Two annual fairs are held.

Jaroslavl is a city of considerable antiquity, being founded in 1025 by the famous Jaroslav, son of Vladimir the Great, who annexed it to the principality of Rostov. It fell under the dukes of Moscow, in 1426. Peter the Great was the first to give it commercial importance, by establishing its linen manufactures, since which its prosperity has been progressive.

JAROSLAW, or JAROSLAU, a town of the Austrian empire, Galicia, circ. Przemisl, on the San, a tributary of the Vistula, 16 m. NNW. the town of Przemisl. Pop. 8,773 in 1857, among whom many Jews. It has a castle belonging to prince Czartorinsky, a cathedral, and several other churches, a high school and girls' school, and manufactures of woollen and linen cloths, rosoglio, and wax candles. It has an extensive trade in those goods, and in wooden wares, honey, bleached wax, flax, and Hungarian wines, considerable quantities of all which are sent to Dantzic, though less than formerly. The town has some rather large fairs; the principal is that holden on the 15th of Aug.

JASSY (an. *Jassiorium Municipium*), a town of Moldavia, of which it is the cap., on the Baglui, a tributary of the Pruth, about 120 m. NNW. Galacz, and 160 m. WNW. Odessa. Pop. estim. at 35,000 in 1863. The town is situated in a fertile country, partly on a hill, and partly in the valley beneath, and covers a large surface, the houses being interspersed with gardens and plantations. Its fortifications were demolished in 1788, and its only defence is now a small fortress on an eminence, opposite the residence of the hospodar. About 4,700 houses, including all its handsomest residences, were destroyed by fire in 1822; since which, Jassy has been partly rebuilt. Of the 6,000 houses it is now stated to contain, about 200 only are of stone or brick. The principal street is wide, and lined with low shops; the other streets are narrow and crooked: they are paved only with logs, and in wet weather are impassable from the mud, while in dry weather they are enveloped in clouds of dust. There is want of cleanliness; and this, with the proximity of marshes, and the exhalations which arise from the imperfectly covered sewers, render the town, especially its lower part, very unhealthy. Jassy is the see of a Greek archbishop, whose residence is perhaps the most remarkable public edifice. It has many Greek churches and chapels, a Rom. Cath. and a Lutheran church, numerous convents, a hospital, three public baths, a large building appropriated to a Wallachian printing establishment, a gymnasium established in 1644, a Lancastrian school, and a school of handicrafts for females founded in 1834. It has few manufactures; some canvass is, however, made in the town for export to Constantinople, and the trade in wine, flax, corn, hides, wool, wax, honey, and tallow is considerable, especially at the fairs. The town has so often suffered from fire that, to be secure, some of the merchants deposit their most valuable wares in chests in the high church of St. Nicholas. The boyars, or principal inhabs., have a great passion for pageantry and gaming, and are illiterate in the extreme. Their costume is a mixture of Oriental and European, and the showy dresses of the upper classes strikingly contrast with the general wretched appearance of the pop.

JASZ-BERENY, a town of Hungary, distr. Jagyzia, of which it is the cap., on both sides the Zagyva, here crossed by a stone bridge, 40 m. E. Pesth. Pop. 15,893 in 1857. The town has a large and handsome Rom. Cath. parish church, several other churches, a Franciscan convent, Rom. Cath. gymnasium, high school, and a town-

Digitized by Google

hall, in which are kept the archives of Jagyzia and Great and Little Cumania. In the centre of the town stands a marble obelisk, erected in 1797 in honour of the Archduke John; and within the precincts of the convent, on an island in the Zagyva, the traveller is shown a tomb, reported to be that of Aitila. The town has a large trade in corn, horses, and cattle, which latter are reared in great numbers in its vicinity.

JAUER, a town of Prussia, prov. Silesia, cap. circ. of same name, on the Neisse, 10 m. SE. Liegnitz, on the railway from Liegnitz to Schweidnitz. Pop. 8,680 in 1861. The town is the seat of the judicial courts for the circle; has a house of correction, a Lutheran, and five Rom. Cath. churches, a free school, and fabrics of linen and woollen cloths.

JAVA, a large and fertile island of the Eastern Archipelago, belonging to the Dutch, and the centre, as well as the most valuable, of their possessions in the East. It lies between the 6th and 9th degs. S. lat., and the 105th and 115th E. long.; separated from Sumatra on the W. by the straits of Sunda, E. by those of Bali from the isl. of that name; having N. the Sea of Java between it and Borneo, and S. the Indian Ocean. Its general configuration is not unlike that of Cuba, except that it is not curved, and it also resembles Cuba in its extent, fertility, products, and commercial value, while it supports eight times its amount of pop. Its length W. to E. is about 660 m.; breadth varying from 40 to 130 m. Area, inclusive of the neighbouring isl. of Madura, 51,336 sq. m.; pop. 13,019,108 in 1861. Among the pop. are 100,000 Chinese, with Malays, natives of Bali and other isls. of the Archipelago, a few Arabs, Moors, and Bengalese, and 20,000 Europeans, mostly natives of the Netherlands.

Physical Geography.—Most part of the surface is mountainous. A mountain chain, obviously of volcanic origin, runs W. and E. entirely through the centre of the isl., its peaks varying in elevation from 5,000 to probably 12,000 ft. All these peaks are of a conical form, and, with few exceptions, each appears to have originated in a distinct convulsion of nature. All have been at some period active volcanoes; in most of them, however, volcanic agency is now apparently extinct, though, from some, eruptions occasionally take place, and sulphureous vapours are emitted, especially after rain. The S. coast is usually bold and rocky and being exposed to all the violence of the ocean, is unsafe for shipping; the N. shore is, on the contrary, low and marshy, and has many tolerable harbours and roadsteads, affording sufficient shelter to trading vessels, the sea being generally smooth. Rivers numerous; but very few of any size. The largest is the Solo, which runs through nearly the centre of the isl., and disembogues on the N. coast, opposite Madura. Its length may be estimated at 400 m., seven-eighths of which are navigable for vessels of 200 tons. Five or six other rivers are at all times navigable for a few miles from the coast, and about fifty more are in the wet season used for the conveyance of rafts and rough produce downwards. There are many extensive swamps, and in the mountains many small lakes occupy the craters of extinct volcanoes.

Basalt, hornblende, and other volcanic formations are abundantly intermixed among the primary rocks of the mountain region. On either side of the mountain chain coarse limestone and argillaceous iron-stone are very prevalent formations, and are covered, especially in the lower parts of the country, with a volcanic soil of great richness in some places 12 ft. in depth. The N. coast rests entirely upon coral. Metals are few. Mineral springs of various kinds are met with, besides naphtha and petroleum wells, and in one distr. is a cluster of hills which eject a mixture of mud and salt water, like the mud-volcano of Maccaluba, in Sicily.

The seasons are divided into the wet and dry. The former accompanies the monsoon from October to March or April; the latter, the E. monsoon, which lasts during the rest of the year. On the N. coast, where the thermometer sometimes rises to 90° Fahr., the climate is very unfavourable to Europeans; but in the interior, at an elevation of 4,000 ft., where the temperature ranges between 50° and 60°, no deleterious influence is to be apprehended from the atmosphere. Thunderstorms and earthquakes are frequent, but hurricanes are unknown.

Java has a most luxuriant vegetation. It is distinguished by the number and excellence of its fruits and other vegetable products, which comprise many of the most valuable common to tropical climates. Dense forests of teak and other trees, useful for shipbuilding, cover a great part of the interior, especially towards the E. end of the island. The teak of Java is inferior in hardness and solidity to that of Malabar, but it is superior in those respects to that of Birmah; and is said to excel every other variety in durability. The sago, and many other palms, the very curious pitcher-plant (*Nepenthes distillatoria*), and two virulently poisonous plants, the *anchar* and the *chetik*, are natives of the island. The latter, which is peculiar to Java, is a large creeping shrub, and identical with the celebrated *upas*, formerly supposed, but on no good foundation, to be, like Avernus, destructive of birds flying over it. The aggregate number of mammalia has been estimated at fifty, including the royal and black tigers, rhinoceros, several kinds of deer, the wild hog, wild Javan ox, and buffalo. Crocodiles and other large reptiles infest the mouths of the rivers and the marshes; and upwards of twenty venomous serpents are enumerated, including some of enormous size. Birds are in immense variety; the bird of paradise visits Java, from Gilolo, Papua, and the other islands to the E.; and the edible nests of the sea swallow (*Hirundo esculenta*) form an important and valuable article of trade for the Chinese markets. This singular product is obtained in the greatest perfection from deep, damp, and all but inaccessible caves along the rugged parts of the sea coast. These are the property of government; and, when they can be easily guarded, produce a considerable revenue. The nests are taken twice a year; and if no unnecessary violence be done, the operation seems to be but little injurious: at all events, the quantity is but little increased by the caves being left untouched for a year or two. The nests are assorted in three qualities, the best being the whitest, or those taken away before they have been soiled by the food or *fæces* of the young bird. The supply of nests being limited and unsusceptible of increase, and being, at the same time, highly prized by the rich and luxurious Chinese, on account of their real or supposed invigorating powers, they bring enormous prices; the finest sorts selling for 5*l.* or 6*l.* per lib., and the inferior for 24*s.* or 25*s.* They are collected, but in smaller quantities, in other parts of the Archipelago.

Trade and Industry.—The vast majority of the Javanese are a nation of husbandmen. To the crop the mechanic looks for his wages, the soldier for his pay, the magistrate for his salary, the priest for his stipend, and the government for its

Digitized by Google

tribute. The wealth of a province or village is measured by the extent and fertility of its land, its facilities for rice irrigation, and the number of its buffaloes. The proportion, at an average of the inhab. engaged in agriculture to the rest of pop. may be stated at 4 to 1; and it is probable that if the whole island were under cultivation, no area of land of the same extent in any other quarter of the globe could surpass it, either in the quantity, quality, or value of its vegetable productions. At present, only about one-third part of the surface is supposed to be under culture; and yet Java produces not only enough of corn for its own consumption, but is the granary of the E. Archipelago, and even of Singapore. Within the last twenty years the cultivation of all its great staples has wonderfully increased; and the progress of Java has been more remarkable than that of either Brazil or Cuba.

The husbandry of the Javanese may be said to exhibit, upon the whole, much neatness and order. Two or more crops are never cultivated in the same field, as is the slovenly practice of the Hindoos. Neither are the lands tilled in common, as is a usual but most injurious practice in India. The peasant and his family bestow their labour exclusively on their own possessions, and consider their culture rather as an enjoyment than a task. It is here only that their industry assumes an active and systematic character: the women take a large share of the labour. The work of the plough, the harrow and mattock, with all that concerns the important operations of irrigation, are performed by the men, but the lighter labours of sowing, transplanting, reaping, and housing, belong almost exclusively to the women.

The implements of agriculture are few and simple; but, as well as the agricultural processes, they are more perfect, and imply a greater degree of intelligence, than those of the Hindoos, and perhaps, indeed, than those of any Asiatic people, the Chinese excepted. The Javanese plough, like the Hindoo, has no share. The stock is tipped with a few ounces of iron, and the earth board is carved out of the body of the plough; the wood is teak, the yoke of bamboo cane. One man conducts the plough, and with a long whip guides the cattle, which never exceed two in number. The Javanese harrow is a large rake, with a single row of teeth. The same yoke and cattle are used for it as for the plough, and over its beam a bamboo cane is placed, on which the person who guides it sits to give a necessary weight to the implement. The hoe is very indifferent; its edge only tipped with a little iron, and its handle about 2½ ft. long. The Javanese sickle is a very peculiar instrument. Its object is to nip off separately each ear of rice with a few inches of the straw; for which purpose it is grasped in the right hand, and the operation effected with a dexterity acquired by habit. The whole farming stock of a villager may be purchased for little more than one-third part of the yearly produce of his land; or for about 15 or 16 dollars, including a pair of buffaloes. These animals usually serve all agricultural and other purposes in place of horses. Cattle of every description are plentiful throughout Java; but the cows are inferior, and yield little milk. Sheep, goats, and hogs are numerous.

Rice is the principal food of all classes: it is grown not only along the whole of the sea-coast, but in all the low grounds and ravines where water is to be had. Wherever rice is cultivated by immersion, the land is divided into small chequers of about 200 or 300 sq. yards, surrounded by dykes not exceeding 1½ ft. high, to retain the water for irrigation. When the culture depends on the periodical rains, the charge of these dykes constitutes, so far as irrigation is concerned, the only care of the husbandmen; but the greater quantity of the grain of Java is raised by the help of artificial irrigation. The principal care of the husbandmen is to dam the brooks and mountain streams as they descend from the hills, and before the difficulty has occurred which would be presented by their passing through deep ravines. From this circumstance, the crests of the mountains, and the valleys at their feet, are best supplied with water, and there, consequently, is the finest and richest husbandry. The slopes of the mountains are formed into terraces highly cultivated, and the valleys are rendered almost impassable from the frequency of the water courses. The art of forcing rice by artificial irrigation is found only to prevail in the most improved parts of the Eastern Archipelago, and in the best lands. This mode does not depend upon the seasons; and hence we see in the best parts of Java, where it chiefly obtains, rice in every state of progress, at any given season, and in the same district, within, indeed, the compass of a few acres. In one little field, or rather compartment, the husbandman is ploughing or harrowing; in a second, he is sowing; in a third, transplanting; in a fourth, the grain is beginning to flower; in a fifth, it is yellow; and in the sixth, the women, children, and old men are busy reaping. Lands which may be inundated at pleasure almost always yield a white and a green crop within the year; and to take two white crops from them, whether a judicious practice or otherwise, is very common.

Two varieties of rice are raised in Java, one a large, productive, but delicate kind, requiring about seven months to ripen, and the other small, hardy, and less fruitful, which ripens in little more than five months. The first is always cultivated in rich lands, where one annual crop only is taken; but where two crops are raised, the other variety is grown. The rapid growth of the latter has, indeed, enabled the husbandman, in a few happy situations, to reap six crops in two years and a half.

Rice, of whatever description, is reaped and stored in the same way. The whole field is not reaped at once, but each portion of the grain is taken successively as it ripens; so that, in the desultory manner in which the operation is performed, a very small field, with many reapers, may occupy a period of ten or twelve days in reaping. With the singular sickle before mentioned the ears are nipped off, and forthwith transported to the village by the manual labour of the reapers, for cattle or carriages are very rarely used. At the village the corn is sufficiently dried by a day or two's exposure to a powerful sun, when it is tied in sheaves or bundles, and deposited in little granaries of wicker work, one of which is attached to every cottage. Grain is never thrashed by treading it out by means of cattle. It sometimes, chiefly in the case of mountain rice, becomes necessary to separate the seed from the straw, which is done by treading, or rather rubbing, the sheaf between the feet, an operation effected with considerable dexterity. Commonly the grain is stored for use and transported to market in the straw. The operation of husking is performed by the women in large wooden mortars, with pestles of the same material. Rice is mostly grown in the E. part of the island, whence it is sent in large quantities to Batavia for exportation, or to Samarang, from which port a good deal is shipped for China and the islands of the Archipelago.

Coffee, which has become the great commercial

Digitized by Google

staple of Java, is grown in the uplands, the best situations for it being the valleys from 3,000 to 4,000 ft. above the level of the sea. The coffee plant grows from 12 to 16 ft. in height; it attains to maturity in about 5 years, and continues to bear well for the succeeding 10 or 12 years, each tree yielding, at an average, 1¼ lb. coffee. The chief peculiarity of the coffee culture in Java is the planting of the *dadap* tree (*Erythrina indica*), in rows alternately with the coffee plants, for the purpose of affording shelter to the latter. Coffee is raised principally in the W. part of the island, where the residency of Preangers furnishes at least one-fourth part of the total produce.

Sugar is, also, a most important staple. The best known in European markets is called Jaccatra sugar; it is grown near Batavia, where numerous sugar mills have been erected of late years. Formerly the sugar mills and grounds were almost wholly in the hands of the Chinese, but this is no longer the case: the Europeans share the culture of sugar with the Chinese, and having the advantage of machinery, surpass the latter both in the quantity and quality of their produce. The Chinese, however, by their frugality and business-like habits, are supposed to reap the greatest profit from its production. A species of sugar obtained by fermenting the juice of a tree, is much used by the natives.

The increase in the production of sugar in Java since 1825 has been very great; the quantity exported in 1862 having been above fifty times greater than in 1826. The exports, in 1862, reached 1,543,896 picols. The increase in the growth of coffee has, however, been far greater than that of sugar; and Java is now become one of the principal sources of the supply of these important products.

In 1839, the government officially announced that the cultivation of spices, previously prohibited in Java, would for the future be free to all parties desirous of engaging in it; and, further, that every facility would be given to such persons, by supplying them with whatever information, and even seed, they might require. This liberal policy has had a considerable influence, though not, perhaps, so much as was anticipated. Indigo has been one of the most successful of the various articles introduced into the island; and has already, indeed, been found to be a formidable rival to the indigo of India. In 1828, the culture of the tea plant was attempted; and considerable quantities are now raised in different parts of the island. The silk-worm was introduced early in 18th century; but though often renewed, the attempts to produce silk have failed. Pepper is extensively produced; but long pepper, though indigenous, has been comparatively neglected. Tobacco and cotton may be ranked among the staple products: considerable quantities of the latter are exported. Maize is grown in the plains, and wheat, rye, oats, and barley in the hilly tracts, but the latter only in small quantities. A great variety of pulses and vegetable oils, the sweet potato, cocoa, betel-leaf, and pistachio nuts are among the other articles of culture.

Labour is very cheap; but the labourers are, notwithstanding, in a much better condition than the inhab. of Bengal, being generally well fed and clothed, and for the climate, well housed. Their food is principally rice or maize, with a little sugar; their clothing is chiefly of cotton, and in the centre of the island it is mostly the manufacture of the country; but they consume a greater quantity of manufactured articles of good quality than the Bengalese. Each peasant has his hut of bamboo, which costs only from about 5s. to 10s. in the first instance, and is usually surrounded by a small garden.

The proprietary right to the land, except in a few districts, belongs everywhere to the sovereign. No law nor usage gives to the oldest occupant the land he has reclaimed from waste, or the farm he has enriched by his industry. As a matter of convenience, the same cultivator may continue to occupy the same field for life, and his family may afterwards succeed, but none can retain possession against the will of the sovereign, or even of his own immediate superior. Half the produce of wet lands, and a third part of that of dry, was formerly exacted by the government, but at present it takes only one-fifth part of the produce; nor has any proprietor purchasing land of the government the right to demand more of the native occupant, except for lands which the proprietor himself may have brought into cultivation, for which he may demand one-third part, or less, according to the productiveness of the land. It is not uninstructive to compare this moderate assessment with the exorbitant amount taken from the occupiers in Hindostan, and to mark the results exhibited in the impoverishment of the inhab. of British India and the stationary state of the country, and the comfort of the Javanese labourer, and the great and rapidly increasing prosperity of Java.

No permission is necessary from the Dutch government for Europeans wishing to go to Java, but a licence from the colonial governor is necessary to remaining there. Europeans are permitted to buy and sell lands in the W. provs., and to hold leases in the N. The principal conditions are the payment of a tax of 1 per cent. on the estimated value of the property; that the proprietor shall not exact more than the beforementioned proportion of produce as rent; and that he shall keep the roads and bridges in repair. The European proprietors receive their rents in kind, and are obliged to take their produce to Batavia to be shipped. The free cultivation of every article of produce is allowed, except the poppy. Large capitals have been expended on the lands held by Europeans in irrigation, the construction of sugar-mills and mills for husking rice, and the introduction of machinery from Europe. The introduction of European capitalists and residents has greatly improved the condition of the natives, who are always ready to enter their service. Theft and robbery are seldom heard of on estates belonging to Europeans, and there are no instances of personal violence done the latter. A village system is very prevalent, by which every commune has its own lands, the culture of which it has a right to direct, and which is conducted for the benefit of its inhabs. in common. This is particularly the case in the E.: the produce is afterwards divided (after deducting the rent) into equal parts, according to the number of hands engaged in its production. The land belonging to a commune varies generally from about 40 to 100 acres, and the extent allotted to each individual from one half to two acres.

Manufactures are few, and principally domestic: the peasant's family fabricates almost every article required for its own use. Cotton goods are woven; and a cubit's length of cotton cloth, 5 spans in breadth, is considered a sufficient day's work by the Javanese weaver.

The Javanese and Indian islanders, in general, are wholly unacquainted with the art of manufacturing fine cloths of any kind: all their fabrics are of a coarse, though durable texture; and all the labours of the loom are performed by women only. Of calico-printing the Javanese are en-

Digitized by Google

tirely ignorant; but they have a singular substitute for it. The part not intended to be coloured, they daub over with melted wax. The cloth, thus treated, is thrown into the dyeing-vat, and the interstices take the colour of the pattern. If a second or third colour have to be added, the operation is repeated on the ground made by the first application of wax; more wax is applied, and the cloth is once, or oftener, consigned to the vat. The greater refinement that is attempted, the more certain seems to be the failure. This awkward substitute for printing adds 100 per cent., at least, to the price of the cloth. And yet, unskilful as the manufacturing industry of the Javanese is, it generally excels that of the other islanders of the Archipelago. Leather and saddlery are made at Solo, boots and shoes at Samarang, mats, and hats of bamboo, coir, fishing-nets, paper from the bark of the *Morus papyrifera*, bricks, cabinet-work, carved wooden articles, boats and ships, in the construction of which the natives are tolerably versed, and *krises*, matchlocks, and other arms, are, exclusive of cottons, the chief manufactures. Copper and brass pans are made, but their manufacture has very much declined. Almost all the manufactured goods used by Europeans are imported. Java is the only island of the E. Archipelago in which salt is made to any extent: along the N. coast there are numerous salt-pans, from which a great deal more of the article is obtained than is required for home consumption—a quantity estimated at 32,000 tons annually. The salt marshes, and other inlets of the sea, are often embanked for the rearing of fish in large numbers.

In architecture, the Javanese surpass the other natives of the E. Archipelago; and many structures of stone and brick, some in a style of superior magnificence, exist in different parts of the island. But the art of building has declined since the middle of the 13th century, and the modern Japanese do not even understand the art of turning an arch, though arches are seen in every ancient structure remaining in Java. The *karatons*, or palaces of the native nobles, are walled inclosures, laid out on a uniform plan, and comprising numerous buildings. They were formerly constructed of hewn stone, but at present consist only of ill-burnt bricks and ill-concocted mortar. After these, the better sort of residences are called *pandapas*, a word derived from the Sanscrit; and the edifice is, therefore, probably of Indian origin. In most of these a thatched roof is supported by four wooden pillars, round which is an awning of light materials, supported by movable props of bamboo; and the whole is closed in by a temporary paling, and divided into apartments by light partitions. The chief materials of the houses of the Javanese are the bamboo, rattan, palmetto leaf, and wild grass. The house of a peasant in a populous part of Java, where materials are not the most abundant, will not exceed the value of 60 days' labour. In the dwellings of the chiefs there is generally, in a conspicuous part of the house, a kind of state bed, rather for display than use; but an ordinary bed is usually only the bamboo floor of the cottage, or, at best, a bench of the same flimsy material, on which a mat and small pillow are laid, and the peasant retires to rest without undressing. Food is served up on salvers or trays of wood or brass. A few Chinese porcelain dishes are used occasionally, but neither spoons, knives, nor forks.

The *commerce* between Java and Holland, which amounts to five-sevenths of the whole external trade, is chiefly carried on by the *Nederlandisch Handel Maatschappy*, or Dutch Commercial Society, which includes some of the most wealthy persons in the mother country.

The principal articles of import are linen and cotton manufactures, chintzes, muslins, provisions, wines and spirits, iron and iron goods, and woollen goods, haberdashery, glass, and copper wares, from Europe and America; opium from the Levant and Bengal; sacking, linens, and wheat, from India; porcelain, tea, tobacco, silk and silk goods, from China; copper and camphor from Japan; gambier, coffee, tin, cotton, gold dust, benzoin, and sandal-wood from the rest of the Archipelago.

The subjoined table shows the quantities of the principal articles exported from Java, in each of the years 1861 and 1862:—

		1861	1862
Arrack	leggers	8,225	7,853
Cochineal	ponden	51,543	5,250
Caoutchouc	piculs	10,776	9,420
Resin	,,	5,352	7,962
Hides, Cow & Buffalo	stuks	210,909	267,241
Indigo	ponden	417,102	384,244
Cinnamon	piculs	65	88
Coffee	,,	210,150	175,264
Oil	,,	7,679	9,361
Pepper	,,	11,098	13,838
Rattans	,,	61,235	55,167
Rice	,,	800,793	529,968
Cloves	,,	178	17
Nutmegs	,,	289	1,325
Sugar, White	,,	1,344,766	1,543,023
,, Brown	,,	61,882	873
Tobacco	,,	112,015	115,921
Tin	,,	4,137	4,086
Birds' Nests (edible)	,,	645	129
Salt	koyangs	3,066	284

The value of the principal articles exported from Java in the year 1861 amounted to 3,478,860*l.*, of which 2,445,380*l.* was to the Netherlands, and but 32,986*l.* to Great Britain. The exports of 1862 amounted to 3,358,996*l.* in value, of which 2,422,081*l.* was to the Netherlands, and 38,010*l.* to Great Britain.

The internal traffic of Java is comparatively small, though few countries have better means of communication. A carriage road, extending from one extremity of Java to the other, 800 m. in length, was made by General Daendels, a Dutch governor, but it is alleged that its construction cost the lives of 12,000 natives.

The Chinese weights are invariably used in commercial transactions at Batavia, and throughout Java and the other Dutch possessions in India. These are the picul and the cattie, which is its hundredth part. The picul is commonly estimated at 125 Dutch or 133⅓ lbs. avoirdupois, but at Batavia it has been long reckoned equal to 136 lbs. avoird. The bahar is 3, and the timbang 5, piculs. The coyang of rice is equivalent to 3,300 lbs. Dutch. The coins in use are similar to those current in the Netherlands. Spanish dollars are received at the custom-house in Batavia, at the rate of 100 for 260 florins.

Government.—Java, inc. Madura, is divided into 24 provinces, or residencies, each governed by a European resident, assisted by a secretary, and as many sub-residents as may be deemed necessary. The residencies are sub-divided into arronds. or regencies, the administration of which, especially in respect to the police, is confided to native chiefs, termed regents. The colonial government at Batavia exerts a full and complete power over all the Dutch colonies in the E. seas. The gov.-general in the cap. is the representative of the king of

Digitized by Google

Holland, and commander-in-chief of the forces by land and sea. He is assisted by a secretary-general, and a colonial council of four members, who must be of Dutch extraction, born in Holland, or one of its dependencies, and thirty years of age, and who can exercise no other functions while they remain councillors. Justice is administered in the last resort in a supreme court at Batavia, which has jurisdiction in all cases above the value of 500 florins. Three subordinate civil and criminal tribunals, and three courts martial, subordinate to a central court in the cap., are established in Batavia, Samarang, and Sourabaya. A member from each of these courts makes a circuit at least every three months into the residencies under its control, to preside at a court of assize, composed besides of four native chiefs chosen annually by the government, on the recommendation of the natives. The permanent tribunals of the residencies are the *land-raaden*, composed of the resident, four mems. selected from among the regents, and a secretary. In each arrond. and commune are justices of the peace, with authority in petty cases. The Chinese are governed by their own laws, under functionaries chosen by them, who are responsible to the Dutch for the behaviour of the rest. There are few slaves belonging to Europeans in Java. The greatest religious toleration exists, and ministers of all Christian sects are equally remunerated by the government. Superior schools are established in the chief towns, and primary schools in most of the residencies. The squadron stationed in Java sometimes comprises several ships of the line, but in time of peace usually consists only of a few frigates and corvettes. There is, besides, a colonial navy of light vessels, which forms a separate branch of service, though both are generally placed under the command of the admiral of the royal squadron, who has the title of Director of the Dutch East India Navy. Besides the foregoing force, a flotilla of cruisers, manned by native Javanese, is supported by the different marine residencies. The land forces consist of several battalions of infantry and artillery, a corps of pioneers, a regiment of hussars, and a portion of a squadron of lancers. In all there are about 10,000 Europeans in the Dutch Javanese army. Notwithstanding the heavy expense incurred in the government, Java is one of the few colonial dependencies that in ordinary years remit a considerable revenue to the mother country.

The *Javanese*, as a nation, are the most advanced of any in the E. Archipelago. They only, of those inhabiting that region, have a native calendar, and have made considerable progress in the arts and sciences of civilised life. They appear to have received these originally from Hindostan, together with the Hindoo religion, which is supposed to have prevailed over Java, till its conquest by the Mohammedans in 1478.

History.—The history of Java cannot be traced with any degree of confidence, further than the latter portion of the 12th century. From that time down to the establishment of Mohammedanism, at the close of the 15th century, the religion, of the people was a modified Hindooism and a number of independent states existed in Java. The ruins of Mojopahit, one of the principal capitals of these several states, are among the most extensive in the East. This city had between two opposite gates, the remains of which still exist, a breadth of about 3 m., which would give a circuit of 12 m. if the enclosure had been a square. The Hindoo kingdom of Mojopahit was overturned by the Arabs in 1478.

The Portuguese reached Java in 1511, and the Dutch in 1595. The latter founded Batavia in 1619, and gradually consolidated their power on the island, though for a long period engaged in continual wars with the native sovereigns. In 1811, Java was taken by a British force from Hindostan, and held till 1816, when, in pursuance of the treaty of Paris, it was restored to the king of the Netherlands.

JAXARTES, a celebrated river of antiquity, now very generally acknowledged to be identical with the Sir-Daria, the chief stream of the Kirghis-steppe. It rises in the Kachkar-Davan, a W. branch of the Tiang-khang range, in lat. 42° 30′ N., and long. 73° 50′ E. Its course to Kokan is WSW. about 180 m.; but at that point it takes a NNW. direction for about 300 m. as far as Akmetschet, in lat. 45° N., long. 66° 5′ E., where the channel divides, the N. and larger branch retaining the name Sir, while that to the S. is called Kouvan-Daria: their mouths in the Caspian Sea lie about 40 m. apart, but are both in long 61°. The entire length of the Sir, including its windings, cannot be much less than 900 m.; and it is both broad and deep, which may be attributed to its being the sole recipient of the waters on the N. side of the great chain separating the khanate of Kokan from Chinese Turkestan. It has no affluent of any great size; its banks (which are low and sandy) are usually flooded in summer and at the beginning of winter; and the water is described as being loaded with a whitish-brown deposit. The ruins of temples and habitations in the Karakoum sands at the lower part of its course clearly proved that its banks were once peopled by a race far more civilised than the brigand Kirghis, who now wander over the steppe.

Herodotus gives the name *Araxes* to a large river full of fish, and studded with islands, situated in a vast immeasurable plain. (See i. 201–216.) Some geographers have conjectured that he meant the Amoo (*Oxus*), others the Wolga; but D'Anville, Heeren, and Mannert clearly show, from the position of the Massagatæ relatively to the Issadones, that no other river but the Sir could have been meant by the Father of History. Ancient geographers agree in stating that the Jaxartes flowed into the Caspian Sea, an assertion, perhaps, not quite so erroneous as modern critics have supposed, if any credit be attached to the investigations of Mouravief and Berg on the level of the country between the Caspian and Arab seas, which lead to the supposition that these great salt-lakes were once united. This conjecture, also, if it be correct, at once accounts for the great breadth (E. and W.) given to the Caspian by all the ancient writers. With respect to the term *Araxes*, which was used by the old authors as applicable to at least *five* distinct rivers, it is now regarded as generic, meaning simply any *rapid* stream, like the modern *Aras*. (See D'Anville's paper, Des Fleuves du Nom d'Araxes, in vol. xxxvi. of the Histoire de l'Acad. des Inscriptions.) Herodotus, whose geography is in general very accurate, was probably led into his mistake respecting the direction of the Araxes by not knowing that this name was held in common by several eastern rivers.

JEAN D'ANGÉLY (ST.), a town of France, dép. Charente Inférieure, cap. arrond. on the Boutonne, which here begins to be navigable for vessels of from 30 to 40 tons, 33 m. SE. by E. La Rochelle. Pop. 6,405 in 1861. The town is ill built, but clean and cheerful. It has an ancient abbey, a handsome public hall, some baths, a theatre, and other places of entertainment, and a brisk trade in wine, brandy, and timber.

JEDBURGH, a royal and parl. bor. and market town of Scotland, co. Roxburgh, of which it is

Digitized by Google

the cap., in a narrow valley on the Jed, about 2 m. above its junction with the Teviot, near the termination of the Cheviots, 40 m. SE. Edinburgh, and 43 m. NE. by N. Carlisle, on a branch line of the Edinburgh and Hawick railway. Pop. 3,428 in 1861. The town consists of four leading streets, which cross each other at right angles, and are wide and well built. Around the town are several beautiful villas. The Town Head, a street parallel with the river, consists of old houses, which, with their inhab., are said for generations to have undergone little or no change. The public buildings are the castle (built on the site of the ancient castle of Jedburgh, once a royal residence), containing a bridewell and prison, the co. hall, the town-house, and churches belonging respectively to the Associate Synod and Relief. The par. church consists of the western portion of the abbey, founded by David I. in the 12th century, and will be noticed below. A majority of the people are dissenters. The denomination of dissenters, termed *Relief*, had its origin here in 1754. The grammar-school of Jedburgh, an endowed seminary, has long been eminent. It had among its pupils Thomson, the author of the 'Seasons' and of the 'Castle of Indolence,' born in the par. of Ednam, in this co., on the 11th of Sept. 1700. Dr. Thomas Somerville, author of 'the History of Great Britain during the Life of Queen Anne,' was minister of Jedburgh.

The chief manufacture of the town is that of woollens. The fabrics made are blankets, carpets, flannels, and hosiery.

The abbey of Jedburgh, belonging to the Canons Regular of St. Augustine, must, when entire, have been one of the most magnificent ecclesiastical structures in Scotland. It exhibits different styles of architecture, according to the taste prevailing at the different periods when it was built. The walls of the nave, central tower, and choir remain, and, though much dilapidated, they sufficiently attest its ancient grandeur. The N. transept, which has a beautiful traceried window, is nearly entire. There are two magnificent Norman doors in this edifice, one at the W. end, and the other in the S. wall of the nave, close to the transept. The ruin generally affords fine examples of the Saxon, Norman, and early English styles, the latter being exemplified in the long range of narrow painted windows above the arches of the middle part of the nave, and in the blank arches of the W. end. The altar, or E. end of the choir, the cloisters, and the chapter-house, have disappeared.

A monastery for Grey Friars was founded in this town by the citizens in 1513; but of it all traces have disappeared. Here may still be seen the house in which Queen Mary lodged after her visit to the Earl of Bothwell, at Hermitage. Mary continued in it several days, owing to a sickness she had contracted in her unfortunate journey. The apartment which she occupied was on the third story, and is in tolerable preservation.

Jedburgh was erected into a royal bor. in the 12th century; but the castle, the site of which is now occupied by the gaol and bridewell, is supposed to have been of earlier date. After having been for some time in the possession of the English, the castle was taken by the Scotch, in 1409, and demolished. Like other borderers, the citizens of Jedburgh were anciently more celebrated for their martial than for their peaceful virtues. Their favourite weapon was a partizan or halbert, known by the name of the 'Jethart (Jedburgh) staff.' Their war-cry, or slogan, was 'Jethart's here.' The term 'Jethart Justice,' which implies execution before trial, is supposed to have originated in the many instances of lynch law executed here on border marauders. (Scott's Border Minstrelsy, i. 50.) The eldest son of the Marquis of Lothian, descended from the ancient border family of the Kers of Fernichurst, for centuries the feudal superiors of the bor., has the title of Lord Jedburgh.

Jedburgh unites with N. Berwick, Haddington, Lauder, and Dunbar in sending a mem. to the H. of C. Registered voters, 174 in 1864. Corporation revenue 29*l.* in 1863–64.

JEDDO. See YEDDO.

JELLALABAD, or JULALABAD, a town of Affghanistan, in a fertile plain, and on the high road between Caubul and Peshawur, 80 m. E. by N. the former, and 60 m. WNW. the latter; lat. 34° 30′ N., long. 70° 32′ E. It is a small town, with a bazaar of 50 shops, and a pop. of 2,000 people; but its number increases tenfold in the cold season, as the people flock to it from the surrounding hills. Julalabad is the residence of a chief of the Barukzye family, who has a revenue of about 7 lacs of rupees a year. The Caubul river passes ¼ m. N. of the town, and is about 150 yards wide: it is not fordable.

JEMME (EL). See TYSDRUS.

JENA, a town of Central Germany, grand duchy of Saxe Weimar, circ. Weimar-Jena, cap. district, on the Saale, 12 m. E. Weimar, and 41 m. SW. Halle, on the railway from Halle to Gotha. Pop. 6,984 in 1861. The town, which is walled, and has handsome suburbs outside its four gates, lies in a valley, between two abrupt eminences, on the left bank of the river, which is here crossed by a handsome stone bridge. The streets are wide, and some of the houses are large and well built, many being highly ornamented with rude and grotesque sculpture. The ducal palace, containing a library and museum, with a good collection of minerals and animals, 1 Rom. Cath. and 3 Protestant churches, 3 hospitals, a lunatic asylum, and the university-house, are the chief public buildings. It is a place of considerable eminence for literature, and the seat of a university, founded in the 17th century by the sovereign princes of the Ernestine branch of the house of Saxony, in whom the patronage and appointment of the professors is still vested. The constitution is similar to that of other German universities; it has faculties of divinity, law, medicine, and philosophy, with 28 ordinary professors, composing a *senatus academicus*, for examining students and conferring degrees: there are also 17 extraordinary professors, and a few *privat-docenten*, or private tutors. The salaries of the ordinary professors range between 80*l.* and 180*l.*, those of the 'extraordinary' varying from 30*l.* to 90*l.*, which are increased by fees from pupils, each of whom pays at the rate of about 5 thalers, or 15*s.* 6*d.*, for the course. The remuneration of the tutors depends wholly on the number of their pupils. The annual expenditure of the university, including the expense of theological and other seminaries, the library (comprising 100,000 vols.), veterinary school, collections, botanical garden, and officers, amounts to about 38,000 thalers, or nearly 6,000*l.*, a year. A fund, also, similar to that in Göttingen, with a capital of 4,600*l.*, is employed in pensioning the widows of professors; and an academical refectory fund (*Speise-anstalt*), supported by endowments and yearly grants from the grand dukes of Saxe-Weimar, Coburg, and Meiningen, furnishes daily meals at several ordinaries for 132 indigent students. The number of students has averaged 500 during the last 10 or 12 years; an attendance

Digitized by Google

far more limited than in the middle of the last century, when 3,000 were in actual residence at the same time. Living in Jena is considered cheaper than at almost any other university of Germany; and a student may live respectably, and enjoy for half the money the same education he could command in Great Britain. The industry of the town, which is considerable, comprises the manufacture of coarse linen fabrics, hats, and tobacco. Three annual fairs are very numerously attended.

Jena is famous in modern history, from its vicinity having been the scene of the great battle of the 14th of October, 1806, between the French army, under Napoleon, and the Prussians, commanded by the king and duke of Brunswick, the latter of whom was mortally wounded in the action. The French gained a complete and decisive victory. The Prussians lost above 20,000 men, killed and taken in the course of the day, with all their cannon and baggage. In fact, their army may be said to have been totally destroyed; as most of the troops who escaped from the field were soon after compelled to surrender.

JERSEY, an island of the English Channel, belonging to Great Britain, and the principal of that group known as the Channel Islands, in St. Michael's Bay, 13 m. W. the coast of France, and 85 m. S. Portland Bill, its NW. point being in lat. 49° 16′ N., long. 2° 22′ W. Shape somewhat oblong; greatest length, E. to W., 12 m.; average breadth, 5 m.; area, 39,000 acres. Pop. 56,076 in 1861, and 57,020 in 1851. The entire N. side of the island, and portions of the NE. and SW. sides, are defended by bold precipitous rocks, rising to upwards of 250 ft. above the sea, and all around it are almost innumerable rocky islets, separated from the cliffs by the operation of the tides, which set with great force and rapidity round the Channel Islands. The surface has a general inclination from N. to S., on which side the coast approaches the level of the sea. There is little table land; but elevated hill ranges run southward, bounding deep and narrow vales, watered by small rivers. Jersey, geologically considered, is, like the other islands in the same group, composed of secondary rocks, resting on granite formations. True granite is not observed; but sienite, which is largely quarried and exported as granite, is very prevalent, passing in some parts into porphyry and greenstone: it is covered in the S. and more level tracts by schistus and clay-slate, intermingled here and there with a clay conglomerate. Iron and manganese, the only metals that occur, are not wrought. The climate, though damp, owing to frequent rains and intense seafogs, is remarkably mild. 'The island,' says Dr. Hooper, 'enjoys an early spring and a lengthened autumn, vegetation being usually active and forward in March, and the landscape far from naked at the end of December. Spring is marked by unsteadiness of temperature and harsh variable weather, with a prevalence of E. winds; and this disadvantage is felt particularly in May, which often fails to bring with it the expected enjoyments. March is mild, and October yet milder.' (Observations on the Top., Clim., and Diseases of Jersey.) The soil in the higher parts is gritty, being composed of detritus from the rocks and sea sand, mixed with vegetable mould; but in the valleys there is a great depth of alluvial matter, washed down by violent rains from the higher lands; and these tracts, where not swampy, are extremely fertile. The SW. corner of the island is a mere assemblage of sandy and barren hillocks. Agriculture is backward, owing partly to the minute division of property, occasioned by the law of gavelkind, and partly to the insufficiency of rural labourers. The value of land ranges between 120*l.* and 160*l.* per acre, and rents vary from 4*l.* 10*s.* to 6*l.* 15*s.*, according to the distance from St. Helier's, the capital. Farms average about four acres, few exceeding ten: the occupiers are for the most part poor.

The rotation of crops, as applicable to the soil and climate, is well understood, and absolute fallows are rarely, if ever, seen. Wheat crops, cut early in August, produce, according to the official returns, nearly 5 qrs. per acre, and the gross yearly produce is said to amount to 13,000 qrs. of wheat and 3,200 qrs. of barley. But the culture of neither wheat, barley, nor oats, is found to be profitable, and they are, therefore, chiefly imported. Potatoes are raised in large quantities, the returns sometimes exceeding 60,000 lbs. per acre, but the seaweed used as manure gives them an unpleasant flavour. Parsneps and mangold-wurzel are largely cultivated. Lucerne is highly in favour with the farmers, as it will grow on soils unfit for other purposes: four crops in a year are not unusual, and the land is afterwards fed off. A large portion of the cultivable land is occupied by apple trees, and the exports of apples and cider have been steadily increasing for some years. The annual yield of apples averages 20 hhds. per acre. The *pear-main* is a good eating apple, but the pride of the island is the *chaumontelle* pear, often a pound in weight, and sold occasionally at the rate of 5*l.* per hundred. The *colmar* pear is also well esteemed, and peach-apricots, melons, and strawberries are abundant, and noted for size and flavour. Timber trees grow in the hedge-rows, and unite with the fruit trees in giving to the scenery softness and richness rarely equalled. 'In fact,' says Mr. Inglis, 'Jersey appears like an extensive pleasure-ground, one immense park, thickly studded with trees, beautifully undulating, and dotted with cottages.' (Channel Islands, i. p. 35.) The manure universally used in dressing the land is sea-weed or *vraic*, the gathering of which is restricted by the island legislature to two seasons, the middle of March and the end of July, times of great interest to the natives. On grass lands the *vraic* is used in its natural state, but for other purposes it is burnt. Cattle breeding is a favourite and highly profitable pursuit here and in the other Channel Islands, and the treasure highest in a Jerseyman's estimation is his cow.

The Jersey cow, usually called the Alderney cow in England, materially differs from that of Guernsey, which is larger, and resembles the short-horned Devonshire breed. It has a fine, curved, tapering horn, slender nose, fine skin, and deer-like form. Its purity is maintained by breeding in and in; and in order to preserve the breed intact, the legislature has prohibited the importation of other breeds under heavy penalties. Milch cows produce daily, at an average, 10 quarts of milk and 1 lb. of butter (8 quarts of the former producing 1 lb. of the latter), the yearly produce of a cow being estimated at 10*l.* The price of a good cow varies from 10*l.* to 15*l.* The butter is chiefly sent for sale to St. Helier's market, or exported to England. Sheep are little reared. The Jersey horse is a cross of the Cossack, procured through the residence of some Russian cavalry on the island in 1800: it is a strong, hard-working animal, but little attention is paid to the improvement of the breed. The oyster fishery employs many of the natives, but lately it has been on the decline, owing to the competition of the French fishermen of Granville. The fishery is most active from Feb. to May. The conger-eel and herring fishery, formerly highly productive,

Digitized by Google

has been almost superseded by the deep-sea cod fishery, which employs nearly 80 vessels of 8,000 tons, and gives employment during the summer to 1,300 Jerseymen.

The trade of Jersey has increased rapidly during the last 50 years, and its commercial relations, formerly confined to England and France, now extend to the chief countries of Europe, the W. Indies, and S. America. The trade with England is subject to certain regulations intended to prevent contraband traffic; but every article of the growth, produce, or manufacture of Jersey is admitted into the mother country on payment of the duties imposed on similar commodities grown, produced, or manufactured at home. The island receives from England cotton and woollen fabrics, and hosiery, hardware and cutlery, earthenware and glass, soap and candles, and about 20,000 tons of coals yearly, in exchange for which it sends apples and cider, cattle, potatoes and potato-spirit, oysters, and granite. The imports from France consist of wine and brandy, skins, fruit, and poultry, for which coals, bricks and potatoes are sent in exchange. The island is supplied with fir and oak timber from Sweden and Norway, with hemp, linen fabrics, and tallow from Russia, with wheat and barley from Prussia and Denmark, and with cheese, geneva, and tiles from Holland, the exports to these countries chiefly consisting of coffee and sugar from Brazil, with which this island has extensive dealings. The imports from Spain, Portugal, and Sicily average yearly 70,000 gall. of wine and 100,000 gall. of brandy. The Jersey merchants also trade with Honduras for mahogany, sent chiefly to England. The manufacturing industry of the island is almost confined to ship-building, shoe-making, and hosiery. Ship-building is carried on to a considerable extent in consequence of the timber imported into the island being exempted from all duty. Shoe-making is pretty extensively carried on, and about 13,000 pairs of boots and shoes, chiefly of French leather, are sent annually to British N. America. The hosiery business has greatly declined, owing to the use of machine-made stockings; and the persons now employed in it depend almost entirely on the demand of the island. The communication with England is kept up by means of steamers to and from Southampton four times a week, and by mail-packets twice a week to and from Weymouth. On the arrival of the steamers from Southampton, packets leave for St. Malo and Granville, returning on the alternate days. Traders are constantly sailing to and from London, Bristol, and other English ports.

The vernacular language of the island is French, which is used in the churches and courts of law: the upper ranks speak it in its purity, but the lower classes speak Jersey-French, a *patois* compounded of old Norman-French with Gallicised English. English, however, is becoming daily more prevalent, and most of the country people understand and speak it. 'The Jerseymen, especially the lower orders, are characterised by blunt independence, often amounting to *brusquerie*, excessive love of gain, and unceasing industry. The minute division of property prevents them from acquiring an independence, while at the same time the actual ownership of land protected by legal privileges, gives them a freedom of sentiment which no tenant at will can enjoy. Their parsimony, however, is not only prejudicial to themselves, as leading them to begrudge provender to their most valuable cows, but is also injurious to others, whom they overreach in bargaining.' (Inglis, Channel Islands.) Their fare is simple and inexpensive, consisting principally of *soupe-à-choux*, a compound of lard, cabbage, and potatoes; conger-eel soup and pickled pork are rarities reserved for festive occasions. The chaumontelle pear is commonly eaten with tea; cider is the general substitute for beer. The higher classes seldom give entertainments or exchange civilities, and are much divided by party spirit. The old parties of *Magot* and *Charlot* have given way to the liberal *Rose* and the exclusive high church and state *Laurel*. Literature is forgotten amid island politics; and even the press, so powerful an engine in England, has scarcely any influence in Jersey. The English residents must be considered as a class quite distinct from the natives, with whom they have little intercourse; they amount to about 4,000, being chiefly half-pay officers with their families, attracted by the cheapness of living and the mildness of the climate.

The revenues of Jersey have greatly increased of late years, for, at an average of the three years ending with 1812, they only amounted to 4,600*l.* a year, whereas, in 1862, they exceeded 8,000*l.*, arising from licenses to tavern-keepers, market-tolls, harbour-dues, and duties on wine and spirits. These revenues, after the current expenses of the government and the interest on the public debt have been paid, are applied to the public works and general improvement of the island. The expense of the militia and English troops (exceeding 20,000*l.* yearly) is defrayed by the British government, and the salaries of the governor and his officers are provided for from the great tithes of the 12 parishes. French and Spanish coins were formerly current in Jersey; but, in 1832, the French government called in its old silver coins, since which time English sovereigns and silver have been commonly circulated. The exchange varies from 8 to 9 per cent. in favour of England, so that an English shilling passes for 13*d.*, and a sovereign for 1*l.* 1*s.* 8*d.* Jersey currency.

Jersey and Guernsey have long enjoyed peculiar privileges granted by John and succeeding monarchs. No process in either of the islands, commenced before an island magistrate, can be carried out of it, and no person convicted of felony *out of* the said islands is to forfeit his inheritance in them, so as to deprive his heirs of their lawful possessions. They are exempted from the jurisdiction of the British courts, except that of the admiralty, and have an immunity from all taxes except those voted by the island legislature.

Jersey is governed by a local legislature, and a distinct judicature under the ultimate control of the sovereign in council. The legislative assembly, called the states, consists, *ex officio*, of 36 members, viz. 12 jurats elected for life by the rate-payers of the island, the 12 rectors of the 12 pars. into which Jersey is divided, and the 12 constables of pars. chosen triennially by the parishioners. To these 30 'official' members of the legislature, 14 deputies were added in 1856, with a view of giving the constitution a more popular character. The legislative assembly is convened by the bailiff, who always presides, either in person or by deputy; and its chief business is to raise money for the public service, and to pass laws for the government of the island; which, however, continue in force only three years, unless ratified by the sovereign in council. The governor, as the king's representative, has a *veto* on all the proceedings of the state, but never uses it, except in cases which concern 'the special interest of the crown.' The Jersey court of judicature, called the 'royal court,' is composed of the bailiff, who here represents the sovereign, and of the same 12 jurats who sit in the states. The officers are, the attorney-general, solicitor-general, high-sheriff or vis-

Digitized by Google

count clerk, or *greffier*, and 6 pleaders appointed by the bailiff, and styled *avocats du barreau*. This court has cognisance of all pleas, suits, and actions, whether real, personal, or criminal, arising within the island, except cases of treason and coining, which are referred to the sovereign in council. A code of laws, compiled in 1771 and sanctioned by the king, is the fundamental statute law; but it is extremely defective, and is continually changed by the enactment of new laws. The custom of gavelkind obtains, with respect to the disposal of real property; the eldest son, however, by common usage, takes half the estate, and the rest is equally divided. Personal property may be devised, but when left intestate is divided among the children, two-thirds going to sons, and one-third to daughters. Debts are recoverable by legal process in the royal court. Insolvents may be compelled to give up (*renoncer*) their property, for the benefit of creditors, and either the *vicomte* may sequestrate it, to pay demands entered against it, or the court may grant the debtor a respite of a year and a day for payment of his debts. Persons not possessing lands or houses may be arrested for debt; but property is attached before the person, and landed proprietors cannot be imprisoned till after a judgment. Debts contracted in England can be sued for in Jersey, if not of more than 6 years' standing; debts contracted in Jersey are recoverable within 10 years.

The military government of the island is conducted by a lieutenant-governor, who has the custody of the fortresses, and the command of both the regular troops and the militia. The chief fortresses are Fort Regent, Elizabeth Castle, and Mt. Orgeuil Castle, all on the S. coast. The island is further defended by a chain of martello towers, redoubts, and batteries, which encircle it. The militia, in which all male natives, from the age of 17 to 65, are liable to serve, comprises 6 regiments and 2,500 men, exclusive of an artillery battalion of 600 men. The regular troops in time of peace seldom exceed 300 men, but 7,000 men were quartered in the island during the French war. Since the reign of James I., the church of England has been the established religion of Jersey, which is under the ecclesiastical direction of the bishop of Winchester. Every par. has a church, and the service is usually performed in French, except at St. Helier's, where English is the language of the congregation. The Independents, Wesleyans, and Baptists have chapels in which service is conducted both in French and English, and there are two places of worship for Rom. Catholics. Two free grammar-schools were established in Jersey in the 15th century, but the endowments are small. In 1852, a superior school, called 'Victoria College,' was opened at St. Helier's, to commemorate the visit of the Queen to the island in 1846.

The remains of Roman fortifications and the discovery of coins belonging to the emperors, prove Jersey to have been a military station, and under the Franks it formed a part of the region called Neustria. The Normans invaded the Channel Islands in the 9th century; and when the duchy of Normandy was annexed to the crown of England at the Conquest, they came under the British dominion. The French have repeatedly tried to gain possession of these islands, which, by their proximity to the coast of France, seem to be their natural property; but they have uniformly failed. The last attempt was made in 1781 by a detachment of 700 soldiers, under the Baron de Rullecourt, who surprised and captured the garrison, but were finally compelled to escape to their vessels after a desperate encounter with the native militia under Major Pierson, in the streets of St. Helier's.

JERSEY (NEW), one of the U. S. of America, in the NE. part of the Union, between lat. 38° 54′ and 41° 20′ N., and long. 74° and 75° 20′ W.; having N. and NE. New York; W. Pennsylvania; SW. and S. Delaware Bay; and E. the Atlantic. Length, N. to S., 170 m.; average breadth about 40 m.: area, 8,320 sq. m.; pop. 672,035 in 1860. A great part of the E. shore is skirted by a chain of low islands, similar to those on the coasts of the more southerly maritime states, but with more numerous, larger, and deeper inlets between them. Great Egg Harbour, Little Egg Harbour, Barnegat, Tomsbay, Shark Inlet, and the united bays of Neversink and Shrewsbury, afford shelter to vessels of considerable burden. The S. half of the state is low, level, sandy, and in many parts barren; but N. of an imaginary line drawn between the mouth of the Shrewsbury river and Bordentown, about lat. 40° 10′, the surface is overspread with several hill-ranges, abounding with rich scenery; and the coast is skirted by the Neversink hills, the only heights of any consequence in the Union near the ocean. A mountain region, rising abruptly from the hilly country, occupies the N. part of the state, which at its N. extremity comprises a portion of the Alleghany chain. The Hudson forms the NE. boundary for about 35 m. The river next in importance is the Delaware, which divides this state from Pennsylvania. The other chief rivers are, the Raritan, which rises in the hilly country, within 5 m. of the Delaware, and falls into Amboy Bay, after a course of 70 m., 16 of which are navigable; and the Passaic and Hackinsach, which fall into the small bay of Newark.

The difference of the climate of the N. and S. parts of the state is very striking. The plain country of the S. is warmer than might have been expected from its lat., the temperature approximating to that of E. Virginia, and admitting of the culture of cotton; while the winter in the N. assimilates in severity to that of the N. states. In the upper part of the state, and along the banks of the rivers, there is some good land; but the surface is in general either sandy or marshy, and it is chiefly by the unremitting industry of its inhabs., who till lately have been principally engaged in agriculture, that New Jersey has been rendered so productive as it is. Wheat, rye, barley, oats, maize, buckwheat, and potatoes are cultivated; and in the higher parts of the state large herds of black cattle and sheep are reared. Large quantities of butter and cheese of superior quality are made. The only wild quadrupeds now met with are the racoon and fox; the fisheries are productive, and employ many of the inhabitants. Iron in the mountains, and bog iron ore in the marshes, form the most important mineral products; but there is abundance of marble, limestone, peat, clay, sand of fine quality, copper, and zinc. The principal articles brought to market are cattle, fruit, iron, flax-seed, butter, cheese, cider, and hams. New York and Philadelphia are the chief outlets for the surplus produce, New Jersey being very advantageously situated between those cities. The exports elsewhere are trifling. Manufactures are already extensive, and increasing; the principal are those of iron.

Paterson is one of the principal manufacturing towns in the U. States, and is well supplied with water-power by the Passaic. Its principal products are cotton, linen and woollen goods, paper and buttons. Manufactories of glass, leather, shoes, carriages, and gunpowder are established in different places.

The internal communications are generally good; the Morris Canal, 101 m. in length, by 30 to 32 ft.

Digitized by Google

wide, and 4 ft. deep, extends across the state, from Jersey city, on the Hudson, to Delaware river. The Delaware and Raritan Canal, 42 m. long, from Bordentown to New Brunswick, is 7 ft. deep, and 75 ft. wide at its surface, and therefore adapted to vessels of considerable burden. It is connected with the Chesapeake, Delaware, and Dismal Swamp canals, and effects a continuous water communication between New York city and Albemarle Sound. Another canal, 4 m. long, connects Salem Creek with the Delaware river. Three railroads were completed as early as 1837; and the principal of these, from Camden to Amboy, a distance of 61 m., in the N. part of the state, was finished in 1832. At present, the state is intersected, in all directions, by railways.

New Jersey is divided into 14 counties: Trenton, on the Delaware, is the capital and seat of government. It owes this rank to its central position only, since it has not above half the pop. or wealth of New Brunswick or Newark. Elizabeth, Burlington, Somerville, and Paterson are the remaining chief towns.

The constitution framed in 1776 has continued, with little variation, to the present day. The governor is chosen, by a plurality vote of the people, for three years. The general election is held on the first Tuesday in November. His term commences the third Tuesday of January. The secretary of state is appointed by the governor, with the advice and consent of the senate. His term of office is five years. The treasurer is elected by the legislature on joint ballot for one year, and until his successor is qualified; and the state librarian is appointed for three years. The superintendent of schools is appointed by the trustees of the school fund for two years. The adjutant and quartermaster general are appointed by the governor. Senators, 21 in number in 1864, are elected for three years, one-third every year. Representatives, 60 in number in 1864, are elected each year. The pay of a member of either branch is 3 dollars a day for the first forty days, 1·50 dollar a day afterwards. The presiding officers are paid 4 dollars a day for the first forty days, and 2 dollars a day afterwards. The legislature meets annually at Trenton, on the second Tuesday of January. The judicial authority is vested in a supreme court, a court of chancery held at Trenton, circuit courts, and courts of *oyer* and *terminer*, held in most of the cos. four times a year; and inferior courts of common pleas, which, with courts of quarter sessions of the peace, are held in the different cos. by judges chosen by the legislature, and receiving no salary. The college of New Jersey, established at Elizabeth Town, in 1746, has been removed to Princeton, where it occupies a spacious edifice. It has a museum and philosophical apparatus, and 2 libraries, with 11,000 vols. A great part of the pop. are Quakers.

The earliest settlement of New Jersey was made by the Dutch, in 1612. Many Swedes and Danes afterwards settled in it, but the Dutch continued to possess it until finally expelled by the English, in 1664. In 1682, it came under the jurisdiction of Penn and his associates. It took an active part in the revolutionary war, and suffered proportionally. New Jersey sends 5 mems. to congress.

JERUSALEM (Heb. *Kadushah*, Gr. Καδύτις by Herodotus, and Ἱεροσόλυμα by Strabo and later writers; mod. Arab. *El-Koddes*), a famous city of Palestine, interesting from its high antiquity, but far more from its intimate connection with the history of the Jews, and the eventful life of the great Founder of Christianity; 128 m. SSW. Damascus, 33 m. E. Jaffa, and 76 m. S. by E. Acra; lat. 31° 46′ 34″ N., long. 35° 31′ 34″ E. Pop. estimated at 12,000, of whom about two-thirds are Mohammedans. The city stands on a hill, between two small valleys, in one of which, on the W., the brook Gihon runs with a SE. course, to join the brook Kedron, in the narrow valley of Jehoshaphat, E. of Jerusalem. The first view of the city from the W. is thus described by Robinson:—'As we approach Jerusalem, the road becomes more and more rugged, and all appearance of vegetation ceases; the rocks are scantily covered with soil, the verdure is burnt up, and there is an entire absence of animal life. A line of embattled walls, above which rose a few cupolas and minarets, suddenly presented itself to my view. I was disappointed in its general appearance; but this feeling originated not so much from the aspect of the town as from the singularity of its position, surrounded by mountains, without any cultivated land to be seen, and not on any high road.' (Pal. and Syr. i. p. 36.) The opposite view, however, from the Mount of Olives, is much more attractive, for it commands the whole of the city and nearly every particular building, including the church of the Holy Sepulchre, the Armenian convent, the mosque of Omar, St. Stephen's gate, the round-topped houses, and the barren vacancies within its circ. The modern city, built about 300 years ago, is entirely surrounded by walls, barely 2½ m. in circ., flanked here and there with square towers. The four principal gates are those of Damascus and Jaffa on the W., that of Zion on the S., and St. Stephen's on the E. The interior is divided by 2 valleys, intersecting each other at right angles into 4 hills, on which history, sacred and profane, has stamped the imperishable names of Zion, Acra, Bezetha, and Moriah. Zion is now the Armenian and Jewish quarter; Acra is better known as the lower city and Christian quarter; while the mosque of Omar, with its sacred inclosure (called by the Turks *el Haram Schereef*), occupies the hill of Moriah. The streets are narrow, like those of all Syrian towns; the houses, except those belonging to the Turks, shabby, and the shops poorly supplied. The public buildings are not numerous, and excepting those consecrated to religious worship, there are none worthy of notice. The baths also and bazaars are mostly inferior to similar establishments in other parts of the E.

The boundaries of the old city, said by Pliny to be '*longe clarissima urbium Orientis non Judææ modo*' (Hist. Nat. lib. v. § 15), are so imperfectly marked, that no fact can be deduced respecting them from the elaborate researches of D'Anville, Clarke, Niebuhr, and others, save only that they varied at different periods; and that, when most extensive, at the æra of its destruction, its treble row of walls embraced a circuit of 33 stadia, including Mount Moriah, Mount Zion, Acra, and Bezetha. (Relandi Palestina, p. 835.) But the walls having been wholly destroyed, it is impossible to trace their exact situation. Josephus most distinctly says that the Romans left only the W. wall standing, with the towers Phasælus, Hippicus, and Mariamne, and that the remainder was rased to the ground. Τον δ' ἄλλον ἅπαντα τῆς πόλεως περίβολον οὕτως ἐξωμαλίσαν οἱ κατασκάπτοντες, ὡς μηδὲ πώποτ' οἰκηθῆναι πίστιν ἂν ἔτι παρασχεῖν τοῖς προσελθοῦσι. (Jud. Bel., lib. vii. c. 1.) This assurance of an eye-witness, and the knowledge that two subsequent and very destructive sieges left scarcely any remains even of a more recent city, suffice to show how little credit is due to any of these antiquarian speculations, however ingenious. It is impossible to describe in detail the many spots within the modern city which blind superstition or minute criticism has fixed on as the scenes of events connected with the history of the patri-

Digitized by Google

archs, and the sufferings of Christ; but some places are ascertained beyond a doubt, which all travellers visit with interest, and which command universal respect. There can, for example, be no question, that the mount (Moriah) on which the mosque of Omar now stands was once crowned with the *House of the Lord* built by Solomon, at a cost and with a magnificence of which we can form no adequate idea (1 Kings, caps. vi. and vii.). This great glory of Judea, after standing for above 400 years, was first rifled, and soon after destroyed by Nebuchadnezzar, king of Babylon. A second temple, built on the site of the first, by the Jews, after their return from the Babylonish captivity, was so much enlarged and improved by Herod the Great, as to be little inferior to that of Solomon. Tacitus calls it, '*immensæ opulentiæ templum*;' and he truly adds, '*nulla intus Deûm effigie, vacuam sedem, et inania arcana.*' (Hist., lib. v. § 8, 9.) Notwithstanding the efforts of Titus for its preservation, this structure, the palladium of the Jewish nation, was totally destroyed during the siege of Jerusalem, A.D. 70. The mosque of Omar, which occupies this sacred site, stands on an elevated four-sided plateau, about 1,500 ft. long, and 1,000 ft. broad, supported on all sides by massive walls, built up from the lower ground. The lowest portion of these walls is supposed to belong to the ancient temple, and to be referable to the time of Herod at least, if not of Nehemiah and Solomon. The mosque *el Sakhara*, the erection of which was begun by the caliph Omar, in 637, is of an octagonal shape, surmounted by a lead-covered dome, above which is a glittering crescent. It has four entrances, one of which, towards the N., is adorned by a fine portico, supported by eight Corinthian pillars of marble. Its forty-eight windows are of stained glass, and the walls are faced below with blue and white marble, and above with glazed tiles of various colours, forming a beautiful mosaic of texts from the Koran. It is altogether a fine specimen of light and elegant Oriental architecture; and the building contrasts singularly with the severity of the surrounding scenery. The interior is not allowed to be entered except by the followers of the prophet; and but few Christians have been admitted within its walls. The arrangements are so managed as to keep up the external octagonal shape. The inside of the wall is white and without ornament, and the floor is of grey marble. A little within the W. door is a flat polished slab of green marble, forming part of the floor, and regarded with peculiar respect by the Mohammedans; a little beyond is a series of twenty-four blue marble pillars supporting the roof, and inside these are four large square columns, forming the support of the dome, which rises about 100 ft. above the floor. The central part is railed round, a single door admitting the devotee to the sacred stone, called the *Hadjr el Sakhara*, on which is shown the print of Mahomet's foot when he was translated to heaven. The whole interior is extremely beautiful, and the effect is much heightened by the blending of colours in the pillars that run round the mosque. Within the same enclosure, near its S. wall, is another mosque, of square shape, called El-Aksa. The cupola is spherical, and ornamented with arabesque paintings and gildings of great beauty. Between the mosques is a handsome marble fountain for ablutions. On the opposite side of the city, in the Latin quarter, called *Harat el Nassara*, is the church of the Holy Sepulchre, a building in the Byzantine style, erected by Helena, mother of Constantine the Great, in the centre of a court or enclosure, filled at pilgrim-time with pedlers of every description, especially venders of relics and rosaries. The building resembles Rom Catholic churches in general, but it is greatly inferior, notwithstanding its valuable marbles, to many of the sacred edifices in Rome.

Immediately in front of the entrance, which is guarded by Moslem soldiers, is a slightly elevated marble slab, called the 'stone of unction,' on which, according to the monks, our Lord's body was laid, to be anointed by Joseph of Arimathea; and near it are 17 steps, conducting to the supposed Mount Calvary, now a handsome dome-covered apartment several feet above the floor of the church, floored and lined with the richest Italian marbles; in the crypt beneath is a circular silver plate with an aperture in the centre, through which the arm is said to reach the identical hole in which the cross was fixed. The great object of interest, however, is the Holy Sepulchre itself, an oblong structure 15 ft. long by 10 ft. in breadth, roofed in with a handsome ceiling corresponding to the richness of the silver, gold, and marble decorating its interior. It stands directly under the great dome of the church, and is divided into two chambers, the first containing the stone on which the angel sat when he addressed the affrighted women, 'Why seek ye the living among the dead? he is not here, but is risen,' and the other being the sepulchre to which he pointed, saying, 'Behold the place where they laid him.' The inner compartment, lined with *verd antique*, is only large enough to allow four persons to stand by the side of a plain white marble sarcophagus of the ordinary dimensions, over which hang 7 large and 44 smaller lamps, always kept burning. Around the large circular hall, which is surrounded by a gallery supported on pillars, and roofed by a vast dome, are oratories for the Syrians, Copts, Maronites, and other sects who have not, like the Greeks, Armenians, and Roman Catholics, chapels in the body of the church. The Greek chapel at the E. end of the hall is parted off by a curtain, and is incomparably the most elegant and highly decorated; the Latin chapel closely resembles those seen in Italy, and has a gallery with a fine organ: that belonging to the Armenians is in the gallery. Various parts of the church are pointed out by monks and pilgrims as the scenes of certain events connected with the last sufferings of Christ; and to such an extent is superstition carried, that a stone is exhibited and gravely declared to be that on which our Saviour was placed when put in the stocks. The faith, indeed, of intelligent men is most severely tested during a visit to this church. There cannot be a doubt that it stands on the hill of Calvary, and it probably includes the site of the crucifixion; but there seems to be little ground for the assumption, that the tomb and site of the cross were so near to each other as to be enclosed by the same building. In an antechamber near the entry are several relics, the most authentic probably of which are the sword and spurs of Godfrey of Bouillon.

The tombs of Godfrey and his brother Baldwin were destroyed during a fire which took place in 1808, and have not been restored, owing to the ill-will felt by the Greek Christians towards the Romish church, to which these monarchs belonged. Westward of the church just described in the *Harât-el-Nassar*, or Christians' Street, is the Franciscan convent of St. Salvador, called by way of distinction *Il Convento della Terra Santa*, a large stone building, having several courts and gardens enclosed within a strong wall. The funds are supplied by contributions sent from Rome and other Catholic countries, and the inmates comprise from 60 to 80 monks, chiefly Italian and

Digitized by Google

Spanish, by whom European strangers visiting the Holy City are hospitably entertained. The church attached to the convent is gaudily furnished with candlesticks and images, and has a good organ. E. of the above stands the Greek monastery, a well supported establishment with a small subterranean church. The city castle, close to the gate of Jaffa, is supposed to have been built on the ruins of the *Turris Psephina* of old Jerusalem; it comprises a few towers connected by curtains, and has a few old guns mounted on broken carriages. Close by it, on the ascent to the hill of Zion, is the Armenian convent, in the best-looking district of the city, comprising within its precincts rooms sufficient to accommodate a thousand pilgrims, and a large garden: the conventual church is spacious, and most elaborately ornamented; the floor is paved in the most delicate mosaic. E. of the convent is a small Armenian chapel, marking the site of the house of Annas, the high-priest; and just outside the gate of Zion is another chapel, supposed to occupy the site of the house of Caiaphas: these positions seem to be far from improbable. (Compare Joseph. Antiq., lib. xviii. c. 3, with St. John xviii. 24.)

Not a vestige remains of the ancient buildings on Mount Zion, where David built a palace, his own residence, and that of his successors, whence it was emphatically called the 'City of David.' Its limits are, however, well defined by the aqueduct which conveyed water from Jerusalem to Bethlehem. The hill-side is now used as a Christian burial-ground. N. of the city, in the district called Acra, are the ruins of Herod's palace, and about 300 yards to the SE., near the reputed pool of Bethesda, is the residence of the *mutzellim*, or Turkish governor, supposed, though with little show of reason, to occupy the site of the prætorium of Pontius Pilate. It is a large straggling building, having a flat roof, which commands a complete view of the mosque of Omar: it stands in the principal street of the modern city, called by the Turks *Harât-el-Allam*, and by the Christians *Via Dolorosa*, the monks having fixed on it as the line of route along which our Saviour was led from the hall of judgment to Calvary. The Jewish quarter (*Harât-el-Yahoud*) occupies the hollow between the hills of Zion and Moriah: it contains seven mean and small synagogues; and the numerous private dwellings, how comfortable soever inside, have uniformly mean and ill-built exteriors, owing, it is said, to the fear of exciting among the Mohammedans any suspicion of the wealth of the despised nation. The poorer Jews are supported by charitable contributions obtained from their fellow-countrymen in Europe, especially in Germany and Spain. The Turks reside on the E. side of the city all round the great enclosure of Mount Moriah.

The suburbs of Jerusalem abound with interesting remains of less questionable antiquity and authenticity than most of those within the modern walls. Close to the gate of Jaffa is the pool of Gihon, near which, in a village of the same name, 'Zadok the priest, and Nathan the prophet, anointed Solomon king over Israel' (1 Kings i. 34), and, at a later period, Hezekiah 'stopped the upper watercourse of Gihon, and brought it straight down to the W. side of the city of David.' (2 Chron. xxxii. 30.) S. of Mount Zion is the valley of Hinnom, in which are numerous tombs hollowed out of the rock, and a building, once used by the Armenians as a charnel-house.

The E. boundary of Jerusalem is formed by the valley of Jehoshaphat, which divides it from the Mount of Olives. Proceeding up this valley, the traveller soon arrives at

> 'Siloa's brook, that flow'd
> Fast by the oracle of God.'

The source of these celebrated waters, which now, at least, are brackish and sulphureous, lies close under the walls of *Harat-el-Schereef* on Mount Moriah; but the *pool* is rather more than ¼ m. below it. The stream issues by an underground passage from a rock, and falls into a small basin of no great depth. It was once covered with a chapel, erected to commemorate the miraculous cure of the man born blind. The descent to the lower pool, which is remarkable for its daily ebbing and flowing, is by a flight of 30 steps, whence it has acquired the name of the 'fountain of stairs.' On the E. side of the brook Kedron, now a mere rivulet, running in a valley so closely pent up as to deserve the name of a mountain-gorge, especially at its N. extremity, are four sepulchres constructed, unlike most in Judea, above ground, and designated the tombs of the patriarchs: one of them is alleged to be the burial-place of Zacharias, the son of Barachias. (Matt. xxiii. 29, 35.) S. of these tombs, and under the shadow of the temple of Solomon, is the favourite burial-ground of the Jews, among all of whom the dearest wish is, that they may lay their bones near those of their long-buried ancestors, and be ready for the summons of Jehovah, when He shall 'come up to the valley of Jehoshaphat: for there will I sit to judge all the heathen round about.' (Joel iii. 12.)

Further NE. are the gardens of Gethsemane, enclosed by a wall, and still in a sort of ruined cultivation, and the Mount of Olives, a hillock covered with stunted herbage, and with patches here and there of the trees with which it was once abundantly clothed. Here every spot has its grotto and legend, and on the hill the precise place is pointed out whence the Saviour ascended into heaven. The Empress Helena built on it a monastery, which the Turks have converted into a mosque; somewhat to the N. is the Church of the Ascension, now in the hands of the Greek Christians. N. of the bridge, over the brook Kedron, and about 250 yds. from St. Stephen's Gate, is the reputed tomb of the Virgin Mary, comprising, besides several cenotaphs, a subterranean chapel, in which lamps are kept constantly burning, and services daily celebrated according to the rites of the Greek church. Passing thence up the bank of the Kedron, and crossing the hill Bezetha, the stranger is conducted to the excavations called 'the Tombs of the Kings.' The road down to them is cut in the rock, and a stone doorway leads to a kind of antechamber, now at least open at the top, and measuring 50 ft. in length by 40 ft. in breadth. It is ornamented by a beautifully carved cornice, and in the SW. corner a door, formed of a single stone slab, admirably adapted to its framework, and easily working on its hinges, leads into a series of chambers, round which are niches in the rock for the reception of the dead. It is very probable that these are the 'royal caves' described by Josephus, as situated close to the N. boundary of the ancient city (see Bell. Jud., lib. v. c. 4): but whether they contained the bones of the sons of David (2 Chron. xxxii. 33), or those of Helena, queen of Adiabene (as Drs. Clarke and Pococke have supposed), is a matter as to which no certain conclusions can be drawn.

Jerusalem, considered as a modern town, is of very slight importance. Superstition and fanaticism constitute the principal bond by which the

Digitized by Google

pop., Christian, Jew, and Moslem, are held together. The Jew despises the Christian, and the follower of the Prophet looks down with contempt on both; but pilgrims of each of the three creeds resort thither in such numbers as to increase the pop. at certain times nearly a half; and heavy taxes are levied on all for the benefit of the pacha. The convents are supported by wealth sent from foreign countries, and a great influx of property takes place from the thousands of annual visitors, rich and poor, so that Jerusalem draws largely on Jaffa, Damascus, Nablous, and other places. But it has no industry whatever—nothing to give it commercial importance,—unless, indeed, a trade, now almost wholly engrossed by the monks of the *Terra Santa* convent, in shells, beads, and relics, whole cargoes of which are shipped from Jaffa for Italy, Spain, and Portugal. The shells are of mother-of-pearl sculptured, and the beads are manufactured either from date-stones or a hard kind of wood called *Mecca fruit*. Rosaries and amulets are also made of the black fetid limestone, and are highly valued in the East as charms against the plague. The retail trade of Jerusalem is quite insignificant. The bazaar, or street of shops, is arched over, dark, and gloomy, the shops are paltry, and the merchandise exposed for sale of an inferior description. This, however, is the only part of Jerusalem where any signs of life are shown. In the other quarters of the town the visitor may walk about a whole day without meeting with a human creature. Well, then, may the Jews, who still indulge the hope of restoring their metropolis to its pristine greatness, lament, with the prophet Jeremiah, 'From the daughter of Zion all her beauty is departed. Jerusalem hath grievously sinned; therefore, she is removed. The adversary hath spread out his hand, and the heathen hath entered into her sanctuary. All her people sigh and seek bread: see, O Lord, and consider, for I am become vile.' (Lam. i. 6–11.)

Nothing can be well conceived so vile, so degrading, as the mummeries enacted in the Holy City, especially during the Easter festival. The monks, who are servants of Mammon rather than of Christ, act on these occasions as showmen and masters of the ceremonies; and even the pilgrims, who crowd to the Sepulchre in such numbers as to make order impossible, too frequently exhibit the greatest levity and unconcern. 'What a scene was before me,' exclaims a traveller 'the whole church was absolutely crammed with pilgrims, men and women hallooing, shouting, singing, and violently struggling to be near the Sepulchre. One man in the contention had his right ear literally torn off.' A number of years ago, during the representation of the blasphemous pantomime, entitled 'the Holy Fire' (intended to represent the descent of the Holy Spirit), the pressure was so intense, 6,000 persons being assembled on the ground-floor, that great numbers fainted, a general confusion ensued, and upwards of 300 were either suffocated or crushed to death. In fact, the whole scene is revolting to every rational and really devout Christian. Such, however, is the strength of superstition, that a pilgrimage to Jerusalem is still regarded, in many parts, as an act of the highest merit, and as bringing with it the assurance of eternal felicity.

The local government of Jerusalem is conducted by the *mutzellim*, or military governor; the *mulakhadi*, or chief of the police; the *mufti*, or chief judge; the *capo-verde*, or superintendent of the mosque of Omar; and the *subaski*, or town-major; all of whom, except the *mufti*, hold their appointment under the pacha of Damascus.

Jerusalem has been usually supposed to be identical with the Salem of which Melchizedek was king in the time of Abraham, anno 1913 B.C., according to Abp. Usher. When the Israelites entered the Holy Land 500 years afterwards, it was in the possession of the Jebusites, descendants of Canaan. Joshua, soon after his entrance into Canaan, 'fought against Jerusalem, and took it, and smote it with the edge of the sword, and set the city on fire.' (Judges i. 8.) But the citadel on Mount Zion was held by the Jebusites till they were dislodged by David, who made Jerusalem the metropolis of his kingdom, and his dwelling in 'the strong-hold of Zion.' (2 Sam. v. 7.) He enlarged the city and built a beautiful palace: it was further embellished by his son Solomon, who in the years 1012–1004 B. C. erected the temple already referred to. Palestine was afterwards successively invaded by the Egyptians, Assyrians, and Babylonians, the last of whom, under Nebuchadnezzar (B. C. 588), took and destroyed the city, burnt the temple, and carried the people captive to Babylon. After a bondage of nearly 70 years the Jews were restored to their city, by Cyrus the Persian, and about *anno* 515 B. C. they rebuilt the temple, under the superintendence of Zerubbaal and Nehemiah. Alexander the Great is said, by Josephus, to have visited Jerusalem in peace, and to have respected the religion of the Jews; but the best critics reject this statement as inconsistent with the ascertained events in the life of Alexander, and unworthy of credit. (Ancient Universal History, viii. 536, 8vo.; Milford's Greece, vii. 533.) Ptolemy Soter, one of Alexander's generals, seized upon Syria and Palestine, sacked the Holy City, and carried off a large portion of its inhabitants to Alexandria. Later monarchs of the Macedonian empire, who attempted to introduce the pagan worship, were successfully opposed by the Maccabees, and the liberty of Judæa was at length restored, anno 165 B. C. The all-absorbing power of Rome finally put a period to Jewish independence, the whole of Syria being reduced by Pompey, and made a proconsular province. This great general, who took Jerusalem after a stout resistance, entered the temple, and explored its inmost recesses; and it is mentioned to his honour, that he touched none of the precious relics, or of the vast wealth accumulated in the sanctuary. '*Victor ex illo fano nihil attigit.*' (Cicero pro L. Flacco, § 28.)

Jerusalem, however, was merely tributary, and had not lost its nominal sovereignty (in other and prophetic words, *the sceptre had not departed from Judah, nor a lawgiver from between his feet until Shiloh had come*, Gen. xlix. 10.) till after the birth of Christ, when it became the residence of a procurator. The repeated rebellions of the Jews at length roused the vengeance of the Romans; and, A. D. 70, the city was taken by Titus, after one of the most memorable and destructive sieges of which history has preserved any account. The Jews, though rent by intestine factions, defended themselves with invincible obstinacy; they contemptuously rejected every proposal for a surrender, and braved alike the attacks of the Romans, and the still more dreadful attacks of famine. But their resistance was unavailing, except for their own destruction; and the city, being taken, was completely destroyed, along with the temple —three towers only being left as memorials of its existence and destruction. According to Josephus, no fewer than 1,100,000 persons fell in the siege, exclusive of above 100,000 taken prisoners. But notwithstanding what has been alleged in defence of this statement by Brotier (Notæ ad lib. v. § 13. Hist. Taciti) and others, there can be no reasonable doubt that it is grossly exaggerated. The

Digitized by Google

statement of Tacitus would seem to be infinitely more probable, though even it is, perhaps, beyond the mark. 'Pervicacissimus quisque illuc perfugerat; eoque seditiosius agebant. Tres duces, totidem exercitus: .... prælia, dolus, incendia inter ipsos, et magna vis frumenti ambusta. .... *Multitudinem obsessorum, omnis ætatis, virile ac muliebre secus*, SEXCENTA MILLIA *fuisse accepimus*. Arma cunctis qui ferre possent; et plures quàm pro numero audebant. Obstinatio viris feminisque par; ac si transferre sedes cogerentur, major vitæ metus quàm mortis.' (Hist., lib. v. c. 12 and 13.) It should be acknowledged, however, that the errors of Josephus, like those of Herodotus, Diodorus, Arrian, and others, in mere numbers, may, perhaps, be attributed less to the author's inaccuracy than to the old-fashioned writing in MSS., in which the numeration is effected by single letters, and mistakes, though easily occurring, are detected with extreme difficulty. In general points of history and topography, Josephus's works should be considered the *vademecum* of the traveller in Palestine.

Adrian rased the city to the ground, ploughed up a great part of the surface, and built on its site the Roman town of Ælia Capitolina. The condition of Jerusalem at this period is well described by Milman:—

'Her tale of splendour now is told and done;
Her wine-cup of festivity is spilt,
And all is o'er, her grandeur and her guilt.
Her gold is dim, and mute her music's voice;
The Heathen o'er her perish'd pomp rejoice:
Her streets are rased, her maidens sold for slaves,
Her gates thrown down, her elders in their graves:
Her feasts are holden 'mid the Gentiles' scorn,
By stealth her priesthood's holy garments worn:
Oh! long foretold, though long accomplish'd fate
Her house is left unto her desolate.'
Fall of Jerusalem.

When Christianity, in the reign of Constantine, became the established religion of the Roman empire, Jerusalem, in name at least, was restored by the zealous Helena. The idol temples were destroyed, and several churches and other buildings were erected on sites supposed to be connected with the events of Christ's history; in short, no efforts and expense were spared in the attempt to raise the Holy City to its rank as the metropolis of Christendom. The period of prosperity thus commenced terminated in 636, by the conquest of Omar, who made the city tributary, heavily taxed the pilgrims, and desecrated the site of the temple, by erecting on it a mosque in honour of Mahomet.

After being more than 400 years subject to the Arabian caliphs, Jerusalem fell into the hands of the Turks, who proved still more oppressive masters than any of their predecessors. The resentment and sympathy of the princes and people of Christendom were now awakened by Peter the hermit, and the Crusades were undertaken to rescue the natives and pilgrims of Palestine, and above all the holy sepulchre, from the dominion of infidels. The Christian army reached Jerusalem in the summer of 1099. 'Godfrey of Bouillon erected his standard on Mount Calvary; the time of the siege was fulfilled in forty days of calamity and anguish, during which the soldiers suffered intensely from hunger and thirst. At length, on a Friday, the day and hour of the Passion, Godfrey stood victorious on the walls of Jerusalem; his example was followed on every side by the emulation of valour; and, about 460 years after the conquest of Omar, the Holy City was rescued from the Mohammedan yoke. A bloody sacrifice was offered to the God of the Christians; resistance might provoke, but neither age nor sex could modify their implacable rage: they indulged themselves three days in a promiscuous massacre, and the infection of the dead bodies produced an epidemic disease.' (Gibbon, xi. 84.) Saladin, 88 years afterwards, appeared in arms before Jerusalem: some feeble and hasty efforts were made for its defence, but within 14 days the banners of the Prophet were erected on its walls. Saphadin, the brother of Saladin, destroyed, in 1218, all that remained of the fortifications of this devoted city, and reduced the population to a servile subjection to the Mohammedans. A series of changes subsequently occurred; but Jerusalem came finally into the hands of Selim in 1519, since which the Turkish flag has always floated over its sacred places. For more than three centuries its fortunes have been stationary: crowds of pilgrims fill its streets at one season of the year, creating a temporary activity, and increasing the revenues of the Turkish officers; but at all other times its condition recalls forcibly the complaint of Jeremiah:—'The city sits solitary that was full of people: she is become as a widow: she that was great among the provinces is become tributary. Her gates are desolate. . . . All her beauty is departed. . . . Filthiness is in her skirts.'

JESI (an. *Æsinum*), a town of Central Italy, prov. Ancona, on the Fiumesino (an. *Æsis*), 16 m. WSW. Ancona, on the railway from Ancona to Rome. Pop. 18,786 in 1864. The town is walled, and has a handsome main street, three large squares, a cathedral, and six other churches, many convents, and a theatre. It is a bishop's see. It has manufactures of silk and worsted stockings. Æsium anciently bore the rank of a Roman colony. Numerous antiquities exist on the banks of the river in its neighbourhood.

JESSELMERE, or JAYSULMEER, a territory of NW. Hindostan, prov. Rajpootana, and formerly one of the five principal Rajpoot principalities, between the 25th and 28th parallels of N. lat., and the 69th and 72nd of E. long. Area 10,000 sq. m. Pop. estimated at 300,000. Surface uneven, and intersected with rocky hills: it is not watered by any considerable stream, has little arable land, and is hardly more productive than the sandy desert that encompasses it. Cultivation is, consequently, very limited; and the parts which are cultivated yield only the coarser grains, which form the food of the inhab. Irrigation is effected with great labour chiefly by means of very deep wells and tanks; but large and spacious tanks occur every 2 or 3 m., and rain water is carefully preserved, the periodical rains being scanty and uncertain. The heat of summer is oppressive, but the cold of winter is sufficiently great for the tanks to be covered with ice every morning during a part of Jan. Mineral products few; the chief are primary limestone and lithographic stone: no metals appear to be found. Wood is scarce. The better kind of houses are of stone; the others mere conical grass huts. The open nature of the country frees it from the most formidable wild animals. Foxes, wolves, hyenas, and jackals are met with, as are several kinds of antilopes, game of various kinds, and wild ducks; but the uncertainty of water hinders both the animal and vegetable kingdom from thriving. Jesselmere is better suited for grazing than agriculture; but neither herds nor flocks are numerous. The horned cattle are of medium size, and indifferent quality: the sheep, though small, have excellent wool. The mass of the pop. consists of Bhattee Rajpoots. The commerce of Jesselmere is insignificant; what little wealth it does possess arises from its being on the chief road between Central India and the Indus.

Digitized by Google

It has no exports of its own; and its only manufacture is that of woollen cloth of a very fine texture, but in no demand elsewhere. Indigo and cotton cloths are imported from Malwah, sugar from Jeypoor and Delhi, iron and brass from Nagore. From 20 to 25 thousand maunds of opium pass annually through Jesselmere to Sinde, the return articles of transit thence being sulphur, assafœtida, rice, and tobacco. Jesselmere contains 2 towns and 84 villages, but, except in its cap., everywhere betrays the strongest marks of poverty.

JESSELMERE, a town of NW. Hindostan, prov. Rajpootana, cap. of the above rajahship, 120 m. WNW. Joudpoor; lat. 26° 56′ N., long. 70° 54′ E. Pop. estim. at 20,000. It is of an oval shape, about 2 m. in circuit, and surrounded by a rampart of loose stones. At its SW. angle is a fort built on a scarped rock about 80 or 100 ft. higher than the city; and it presents a commanding appearance externally, and is in reality a place of considerable strength. It is of a triangular shape, its two longest sides, about 300 yards in length each, facing the W. and N. The only entrance is on the N. side, leading through several narrow and strong gates. The whole of the works are of firm substantial masonry, and comprise a vast number of towers. These stud the brow of the hill on all sides, and give it a very remarkable appearance; some are as much as 40 ft. in height. The fortress is supplied with water from wells 80 fathoms deep. The town is regularly laid out, and, for an eastern city, its streets are wide. Its houses are lofty, spacious, terrace-roofed, and built entirely of a hard yellow limestone, sometimes elegantly carved. Some opulent merchants reside at Jesselmere, it being on the great commercial route from Malwah to the port of Kurachee.

JESSORE, a distr. of British India, presid. and prov. Bengal, chiefly between the 22nd and 24th degs. of N. lat.; and the 89th and 90th of E. long.; having N. the main stream of the Ganges, separating it from the distr. Rajeshaye; E. Dacca and Backergunge; W. Nuddea and the 24 pergunnahs, and S. the Bay of Bengal. Length, N. to S., about 160 m.; average breadth 32 m. Area 3,512 sq. m.; pop. 381,744 in 1861. It is a flat country, intersected by numerous interlacing branches of the Ganges; its S. part comprises a portion of the region called the Sunderbunds; and, on the shore, are many extensive marshes, in which salt is largely made on government account. The soil is very fertile, and a good deal of rice is grown. Indigo, tobacco, mulberry, betel nut, and long pepper are also raised; but a great proportion of the land is uncultivated, and covered with jungle. Chief towns, Jessore or Moorley, the residence of the Zillah authorities, Culna, and Mahmudpoor.

JEYPOOR, or JYEPORE, a city of NW. Hindostan, prov. Rajpootana, former cap. of a subsidiary state of the same name, in a barren valley, 150 m. SW. Delhi; lat. 26° 55′ N., long. 75° 37′ E. Pop. estimated at 60,000. Jeypoor is one of the handsomest and most regularly built cities of Hindostan. It is surrounded by a battlemented wall of grey stone, flanked with towers, and defended or commanded by a citadel and a line of forts on the adjacent heights, a few hundred feet in elevation. Jeypore is laid out, like most modern European and American cities, in regularly square blocks of houses. A main street, 2 m. long, and about 40 yards broad, traverses it W. to E., and is crossed at right angles by four others of equal width, though much shorter. At the points of intersection are spacious market-places, and there are two good squares, which, like the principal streets, are crowded with shops. The great thoroughfares are, however, disfigured by hovels, platforms, and stalls, erected along the centre of them, which detract greatly from their appearance. The houses are generally two stories high, but some are 3 or 4 stories, with ornamented windows and balconies, and are often adorned with frescoes and sculptures. The chief public edifice of Jeypoor is a magnificent palace, constructed, it is said, by an Italian architect, in the 15th century, for the rajah Jey Singh, under whose reign this city was one of the principal seats of Hindoo learning. This palace, with its fine gardens, occupies about one-sixth part of the city. Jeypoor has numerous temples, in the purest Hindoo style, and some are of larger dimensions than are to be found in any other city of Upper Hindostan.

JHYLUM, JELUM, or BEHUT (an. *Hydaspes*), a river of the Punjab, Hindostan, which rises in the SE. extremity of Cashmere, and, after a course of about 450 m., at first NW. or W., and afterwards SW., joins the Chenab (Acesines), about lat. 31° 10′ N. During most part of its course it is not fordable: and at Jelalpoor, in lat. 32° 40′, it has been found, even when not at its highest point, 1,800 yards broad, and 14 ft. deep. It is correctly described by Arrian as 'muddy and rapid,' having a current of 3 or 4 m. an hour. Its banks are interesting as the scenes of several of the exploits of Alexander, but it is impossible to indicate their localities. Not far from the Jhylum is the famous *tope* of Manykiala. (See PUNJAB and INDUS.)

JOHANNISBERG, a village famous for its vineyards, with a castle, in the duchy of Nassau, near the E. bank of the Rhine, on the N. confines of the distr. called the *Rheingau*, 16 m. W. by N. Mentz, on the railway from Coblenz to Frankfort-on-the-Main. Pop. 874 in 1861. The village, situated on the slope of a hill, or berg—berg of St. John—formerly belonged to an abbey, the monks of which planted the vineyard towards the end of the 11th century. The hill comprises, excluding the portion which produces only ordinary wine, about 63 arpents; and its produce in average years is estimated at about 25 tuns of 1,300 bottles each. The soil is composed of the *débris* of various coloured stratified marl. The grapes are gathered as late as possible, or when they are dead ripe. Its choicest produce, called Schloss-Johannisberger, is admitted to be the very finest of all the Rhenish wines, being distinguished by its high flavour and perfume, by an almost total want of acidity, and by its being improved the longer it is kept. The finest growth in the best years fetch enormous prices, sometimes as much as 5*l.* the bottle. The vintages of 1779, 1783, 1801, 1811, and 1822, enjoy a high reputation. After the secularisation of the abbey of Fulda, this celebrated vineyard became successively the property of the late king of the Netherlands, Marshal Kellerman, and Prince Metternich, father of the present owner, to whom it was presented by the late emperor of Austria. The prince has repaired the castle, which he occasionally occupies.

JOHN'S (ST.), a city and sea-port of New Brunswick, on its S. coast, and the largest and most important town, though not the cap. of that colony. It is built on rocky and very irregular ground on a small peninsula, on the N. side of the St. John river, near its mouth, in the Bay of Fundy, 130 m. WSW. Halifax, and 190 m. ENE. Augusta, in the state of Maine; lat. 45° 20′ N., long. 66° 3′ W. Pop. 20,715 in 1861. Its harbour is commodious and spacious; and though a bar across its entrance dries at low water, the rise of the tides is such (from 25 to 30 ft.) that large vessels enter the port at high water. The en-

Digitized by Google

trance to the harbour is between a bold headland bounding the river to the E., and Partridge Island, about 2 m. S. of the town, which has a lighthouse and a fort. Another fortress guards the harbour, at Carleton, opposite St. John's, and on a commanding height immediately above the town itself is Fort Howe, now in ruins. At ebb tide a mud flat extends for some distance in front of St. John's; but at high water it is covered, and the aspect of the place is most imposing. A projecting rock separates the town into the upper and lower coves. The former, containing the wharfs and warehouses, is the principal division; but the lower has been much improved by the erection of a line of barracks. Several of the streets are inconveniently steep, and in winter even dangerous, though much labour has been employed to level and adapt them for carriages. The houses, principally of brick, are regularly arranged, and on the whole handsome; but ornament has not been much studied. The chief public buildings are, a handsome stone court-house, recently erected on high ground above the middle of the town, the marine hospital, poor-house, gaol, two episcopal churches, a Scotch church, and Roman Cath., Methodist and Baptist chapels. The grammar school has an endowment of 135*l*. a year, and there are other schools, and several religious and charitable associations. St. John's has a chamber of commerce, a savings' bank and a marine insurance company, two public libraries, and a good news-room.

On the opposite bank of the river is the little town of Carletown, under the municipal government of St. John's, comprising many new buildings, a church, with some saw-mills, and building docks. St. John's is a corporate city, which, including Carleton, is divided into six wards, and governed by a mayor, recorder, six aldermen, and six assistants. The mayor, recorder, and other chief officers, are appointed by the governor; the aldermen being elected annually by the freemen.

St. John's is a free port, and the great commercial emporium of New Brunswick. In 1862 there entered 1,644 vessels, of a total burthen of 347,708 tons, and there cleared 1,439 vessels, of 366,652 tons burthen. The tonnage of the port, in 1862, amounted to considerably more than one-half of the whole shipping of New Brunswick.

At the end of the last century the site of this thriving city, with the exception of a few straggling huts, was covered with trees. This was its condition at the peace of 1783, since which time its growth has been extraordinary. Its chief importance is in its position, which must ever command the trade of the vast and fertile country watered by the lakes and streams of the river St. John.

John (St.), or the St. John's River, called by the Indians *Looshtook*, 'the long river;' the principal river of New Brunswick, and, next to the St. Lawrence, the finest in British America. The area of its basin is estimated at 19,200 sq. m. The St. John rises from two principal sources, about lat. 46° 10′ N. and long. 70° W., in the territory N. of the state of Maine, disputed between Great Britain and the U. States. It flows through this territory, at first NE., for about 100 m.; and then takes a bold curved sweep to the E., as far as long. 67° 50′, where it leaves the disputed country, and enters the prov. of New Brunswick. It then flows, first in a S. direction for about one-fourth part of its course; then E. for perhaps 80 m.; and lastly S. for at least 50 more; when it discharges itself into the Bay of Fundy, a little below the city of St. John, about lat. 45° 20′ and long. 66°, after an entire course of 380 m.

Independent of any artificial improvement, the St. John is, in the greatest part of its course, one of the most navigable of the Atlantic rivers, being much less impeded by rapids, shoals, or falls, than any other stream between it and the Hudson. At its mouth, which forms St. John's harbour, it is 5 m. wide: and at Fredericton, 85 m. up, it is half a mile wide. Vessels of 50 tons come up to Fredericton, and barks of 20 tons ascend to the Great Falls, about 200 m. from its mouth, above which it is fitted only for boats. It is unfortunate, however, that almost at the very entrance of this river, about a mile above St. John's, its bed contracts to about 400 ft. in width, and is crossed by a formidable rocky bar, on which there is seldom more than 17 ft. water, and which only admits of the passage of vessels at certain times of the tide. The waters of the river at low ebb are in this place about 12 ft. higher than the sea, and at high water about 5 ft. lower; so that in every tide there are two falls,—one outwards, and one inwards. The only time of passing with safety is when the waters on either side of the bar are about level, which happens twice in a tide, continuing nearly 20 minutes at a time. The tide is not perceptible much above Fredericton; where it rises to from 6 to 10 inches. The Great Falls, near lat. 47°, consist of one principal cataract, perhaps 50 ft. high, and some smaller ones of several feet each, extending altogether for ½ m. along the stream, and having a total fall of about 75 ft. Though very inferior in respect of magnitude compared with that of Niagara, the Falls of the St. John are said to be more picturesque. Its entire descent, from its mouth to its source, is estimated at above 1,000 ft.

Besides St. John's, Carleton, Gage-town and Fredericton, there is no place of any consequence on the banks of the St. John; but the country through which it flows is well cleared, and settled, and is said to be greatly superior in fertility to the river basins of New England. (See Maine.)

John's (St.), a town of the island of Newfoundland, of which it is the cap., on its SE. coast. Lat. 47° 32′ N., long. 52° 29′ W. Pop. 25,229 in 1861. The town stands at the inner end of an excellent harbour, the narrow entrance to which has 12 fathoms water in the centre of the channel. It is protected by several strong batteries and forts, and a light-house is constructed on a rock at the N. side of its entrance. The town, which extends along nearly the whole N. side of the port, principally consists of one main street, more than a mile in length, and from 40 to 50 ft. broad, from which, at almost every step, stages, called *fish-flakes*, project into the sea. There are some good stone and brick houses, and other handsome buildings, erected principally since the great fires that devastated St. John's in 1816 and 1817.

The population of St. John's fluctuates greatly. Sometimes, during the fishing season, the town appears full of inhabitants: at others it seems half deserted. At one time many of the inhabs. depart for the seal fishery; at another to different cod-fishing stations. In the fall of the year the fishermen arrive from all quarters to settle their accounts with the merchants, and procure supplies for the winter. At this period St. John's is crowded with people; swarms of whom depart for Prince Edward Island, Nova Scotia, and Cape Breton, to procure a livelihood in those places, among the farmers, during winter. Many of them never return again to the fisheries, but remain in those colonies, or often in the U. States.

Fort Townshend, on a steep height above the town, was formerly the residence of the governor;

Digitized by Google

but a new edifice has been more recently built at a cost of 50,000*l*. The custom-house, church, and other public buildings present nothing remarkable. The inhab. are generally possessed of the rudiments of education, and many of them pretty well informed. Most of the pop. are R. Catholics, and this is the see of a Rom. Catholic bishop. It is a good deal agitated by party contentions.

In 1862 there entered the port of St. John's 786 vessels, of a total burthen of 108,630 tons, and there cleared 729 vessels, of 102,783 tons burthen. Agriculture is scarcely pursued at all in the neighbourhood, the ground being rugged and stony. Potatoes form the chief crop. Provisions and other commodities are dearer than on the American continent, from which they are mostly imported.

JOHNSTON, a manufacturing town of Scotland, par. of Paisley, co. Renfrew, on the Black Cart, 3 m. W. Paisley, and 18 m. W. by S. Glasgow, on the railway from Glasgow to Ayr. Pop. 6,404 in 1861. The rise of this town is remarkable, having been, for a time, more rapid than that of any other in Scotland. The ground on which it stands began, for the first time, to be let on building leases, in 1781, when it contained only *ten* persons. In Oct. 1782, 9 houses were built, and 2 more were being erected. In 1792 the inhabitants amounted to 1,434; in 1811 to 3,647; and in 1831 to 5,617. The increase from 1831 to 1861, it will be seen, was not very considerable. The place was formerly called 'the Brig o'Johnston,' from a bridge over the river in the immediate vicinity. It is built on a regular plan and lighted with gas. There are two squares, besides numerous streets, and public works. The houses are, for the most part, two and three stories in height. To each house is attached an adequate extent of garden ground. The town has an established church, and various dissenting places of worship. In its immediate neighbourhood is Johnston Castle, the residence of Mr. Houston, lord of the manor. There are excellent grammar and English schools. The civil polity of the town is managed by a committee elected annually by the feuars.

Johnston is chiefly distinguished for its manufactures, consisting of numerous cotton mills. There are, besides, brass and iron foundries, on an extensive scale; with machine manufactories, as well as various minor branches of industry. The Glasgow and Ardrossan canal, projected in 1806, has been completed only from Glasgow to Johnston. It was on this canal that light iron boats, or gig-boats, for the rapid conveyance of passengers, were first (1831), tried and established. Near Johnston are four collieries.

JOIGNY (an. *Joviniacum*), a town of France, dép. Yonne, cap. arrond., on the Yonne, 15 m. NW. by N. Auxerre. Pop. 5,971 in 1861. A handsome quay runs along the bank of the river, above which the town rises on a steep declivity, crowned with the remains of an ancient castle. Joigny is surrounded with old walls, and entered by 6 gates; it has 2 suburbs, with one of which it is connected by a handsome stone bridge of 6 arches across the Yonne. The streets are narrow, steep, and inconvenient; but some of the houses are good. It has a cathedral built in the fifteenth century, two other Gothic churches, and cavalry barracks, with vinegar and other factories.

JORDAN (Arab. *Sheriat-el-Kebir*), a river of Palestine, famous in sacred history; it rises in lat. 32° 35′ N., long. 33° 26′ E., a few miles N. of Banias (the an. *Cæsarea Philippi*), in a small pool formerly called *Phiala*, on the W. slope of Djebel-es-Sheikh, the *Antilibanus* or *Mount Hermon* of antiquity. After a S. course of about 40 m., during which it crosses the fenny Bahr-el-Hool (an. *Lake Merom*), it opens into the lake Tabariah or *Gennesareth*, close to the ancient town of Bethsaida. At the S. end of this fine sheet of water (15 m. long, and about 7 broad), on and near which occurred so many striking scenes in the history of Christ, the Jordan enters a narrow, pent-up valley called el-Ghor, and after running through it with a tortuous southerly course of about 90 m., empties its waters into the Dead Sea, its entire length being about 150 m. The discoveries of Burckhardt in the Wady-el-Araby, which he traced completely up from the Red Sea to the lake Asphaltites, have led to the supposition that before the volcanic movement which so altered the surface, this river had a continuous course down this valley to the Gulf of Akabah (see DEAD SEA). Its tributaries on the W. side are mere torrents, one of the largest of which is the brook *Kedron*, rising in the suburbs of Jerusalem: the E. affluents comprise the Sheriat-el-Mandhur (an. *Jarmok*, Gr. Ἱερμαξ), and the Wady Zerka, which is the scriptural *Jabbok* (see Deut. iii. 16). The breadth and rapidity of the stream vary in different parts and at different seasons. The floods occur in February and March, and at that season, when filled with the melted snow of Mount Lebanon, it is from 30 to 70 yards wide, and about 17 ft. deep, with a current so rapid that it is not safe even for an expert swimmer to bathe in it. In the dry seasons it is low, and has a comparatively languid current; and to this circumstance, probably, may be attributed the discrepancies in the statements respecting the nature and magnitude of the river. The channel, however, having cut its way through a loose sandy soil, is much deeper now than formerly, and the waters, even in floods, run within narrower limits. A second and higher bank now skirts the actual bank at about a furlong's distance on either side, and the intervening space is so filled up with bushes and trees (tamarisks, willows, oleanders, and myrtles), that the stream is completely hidden from view till its upper and dry channel has been passed. Lord Lindsay says:—'The river is concealed till you are close upon it, by dense thickets of trees, reeds, and bushes "the pride of Jordan" (Zech. xi. 3), growing luxuriantly to the very water's edge. The lions, hippopotami, &c. (Jer. xlix. 19), that formerly haunted these thickets are extinct; but wild boars are still found there.' 'The nightingales,' says the same writer, 'sung in the cool starlight night from the trees; and the scene altogether was most delightful.' (Travels in Egypt and the Holy Land, vol. ii. p. 65.)

The water is described as being rather warm than cold, of a white sulphureous colour, but free from any taste or smell. On analysis, however, it proves to be strikingly dissimilar to that of the Dead Sea; for while the latter contains ¼ part of its weight of salts, the former has only 1-300th part of the proportion of solid matter contained in the water of the lake. (Dr. Marcet, Phil. Trans. for 1807.)

The Jordan has been the scene of many events in which biblical scholars must be deeply interested. This river valley was the dwelling of Lot, who 'pitched his tents towards Sodom,' the men whereof 'were wicked, and sinners before the Lord exceedingly.' Here the four kings, persecuted by the five powerful princes close to the Salt (or Dead) Sea, fought and regained their liberty; and the power of the latter was afterwards destroyed by divine interference. (Comp. Gen. xiv. 1-12, with xix. 24-26.) At a later, but still very early historical period, when the clans of Israel were returning, after an absence of four centuries, to the possessions of Abraham, the great sheikh of a

Digitized by Google

nation that was yet only in the nomad state, the ark, by command of Jehovah, was carried by the priests before the people, fell into the stream, and 'the waters which came down from above, stood and rose up upon an heap: and those that came down towards the sea of the plain, even the Salt Sea, failed, and were cut off; and the people passed over right against Jericho.' (Josh. iii. 14-16.) It is said that the prophets Elijah and Elisha afterwards divided its waters to prove their divine mission, and the special fact that 'the spirit of Elijah doth rest on Elisha.' (2 Kings ii.) In Christian times it has been celebrated as the stream in which Jesus Christ received from John the baptism which prepared him for the ministrations destined to exercise so important an influence over mankind. By modern devotees in Palestine, the spirit of this institution has been forgotten, and a superstitious attention to the form substituted in its stead; hence every year pilgrims, at the great Easter season (about April), are found rushing, young and old, rich and poor, sick and sound, men, women, and children, into the stream. 'All,' says Mr. Elliott (an English clergyman), 'carried with them the piece of cloth with which they wished to be enveloped after death.' The Moslems ridicule these vain ablutions, and their violation of decorum; and the Protestant cannot but lament the degradation they exhibit. (Elliott's Travels, ii. 476; Robinson's Palestine, i. 69–75.)

JORULLO, JURUYO, or XURULLO, an active volcano of Mexico, state of Valladolid, in an extensive plain, 70 m. SSW. the city of that name, and 80 m. from the Pacific; remarkable not only for its extent, but as being the only volcano of any consequence that has originated in New Spain since its conquest by Europeans. Its origin was, perhaps, one of the most tremendous and extraordinary phenomena that has ever been witnessed; for, in one night, there issued from the earth a volcano 1,600 ft. high, surrounded by more than 2,000 apertures, which still continue to emit smoke. Humboldt, who visited Jorullo, describes its appearance and formation nearly as follows:—'A vast plain extends from the hills of Aguasarco, to near the villages of Teipa and Petatlan, from 2,460 to 2,624 ft. above the level of the sea. In the midst of a tract of ground, in which porphyry, with a base of greenstone, predominates, basaltic cones appear, the summits of which are crowned with evergreen oaks and small palm trees, their beautiful vegetation forming a singular contrast with the aridity of the plain, laid waste by volcanic fire. Till the middle of the 18th century, fields cultivated with sugar-cane and indigo occupied the extent of ground between the rivers Cuitamba and San Pedro. From June, 1759, hollow subterranean noises, accompanied by frequent earthquakes, succeeded one another for from 50 to 60 days. At length, in the night between the 28th and 29th of Sept., a tract of ground from 3 to 4 sq. m. in extent, which goes by the name of *Malpays*, rose up in the shape of a bladder. The bounds of this convulsion are still distinguishable in the fractured strata. The *Malpays*, near its edges, is only 39 ft. above the old level of the plain called the *Playas de Jorullo*; but the convexity of the ground thus thrown up increases progressively towards the centre to an elevation of 524 feet. Flames were now seen to issue forth, it is said, for an extent of more than ½ sq. league; fragments of burning rocks were thrown up to prodigious heights; and, through a thick cloud of ashes, illumined by volcanic fire, the softened surface of the earth was seen to swell up like an agitated sea. The rivers of Cuitamba and San Pedro precipitated themselves into the burning chasms. Thousands of small cones, from 6 to 9 ft. in height, called by the natives *hornitos* (ovens), issued forth from the *Malpays*, from each of which a thick vapour ascends to the height of from 30 to 50 ft. In many of them a subterranean noise is heard, which appears to announce the proximity of a fluid in ebullition. In the midst of the *ovens*, six large masses, elevated from 1,312 to 1,640 ft. each above the old level of the plains, spring up from a chasm, the direction of which is from NNW. to SSE. The most elevated of these enormous masses, the great volcano of Jorullo, bears some resemblance in shape to the *Puys* of Auvergne, in France. It is continually burning, and has thrown up from the N. side an immense quantity of scorified and basaltic lavas, containing fragments of primitive rocks. These great eruptions of the central volcano continued till Feb. 1760. In the following years they became gradually less frequent; but the plains of Jorullo, even at a great distance from the scene of the explosion, were long uninhabitable, from the excessive heat which prevailed in them.'

The Cuitamba and San Pedro totally disappeared on the occasion above mentioned; but two new streams are now seen bursting through the argillaceous vault of the *hornitos*, having the appearance of mineral waters, in which the thermometer rises to 126° Fahr. The Indians give these streams the names of the former rivers, because, in several parts of the Malpays, great masses of water, with which they are supposed to be continuous, are heard to run in the direction from E. to W., as the Cuitamba and San Pedro did originally. Jorullo is situated in the great volcanic band of Mexico, which runs E. and W., nearly at right angles, to the Cordillera, including the peaks of Orizaba, Puebla, Toluca, Tancitaro, and Colima; and of which Humboldt conjectures the Revillagigedo islands, in the Pacific, may mark the continuation.

JOUDPOOR, or MARWAR, a state of NW. Hindostan, under the British government, between 24° 36′ and 27° 40′ N. lat., and 70° 4′ and 75° 33′ E. long. Area, 35,672 sq. m. Pop. 1,783,600 in 1861.

Joudpoor and Jesselmere, may be taken as pretty fair types of the old Rajpoot states of NW. India; the former being, however, the most extensive and valuable of any, and the latter the least so. The wealth of Joudpoor has been much undervalued, and it has been erroneously considered as a portion of the sandy desert. Its exports in wheat are considerable, the soil is favourable to many other kinds of grain, and its central parts are highly productive. The country consists generally of open plains, the hills being almost confined to the S. The soil is not arid as in Jesselmere and Bicanere, but is almost every where watered by torrents, and affluents of the Loonee or Salt river. This river rises in Ajmere, and flows through the centre of Joudpoor to enter the Runn of Cutch. Its waters are distributed over the adjacent wheat lands, which extend along its banks from Ajmere to the Runn, by means of earth aqueducts, sometimes a mile in length. The fields are surrounded with dykes to prevent the egress of the water; and being thus irrigated, Joudpoor produces heavy crops of barley, *bajree*, *jowaree*, and other kinds of grain. Neither the climate nor soil is favourable to the poppy, but an inferior kind of opium is grown in the E., where it is an article of large consumption and export. Tobacco is produced in some parts, but not in a sufficient quantity to supersede the necessity of importing it from Gujrat. Cotton is an important article of produce. Marwar is celebrated

Digitized by Google

for its camels, which may be purchased in every village, at from 50 to 60 rupees each, and which have contributed greatly to the commercial importance of the state, by facilitating the conveyance of almost every kind of goods. Goats, sheep, and hogs are numerous; mutton is good, but the wool is not so much prized as that of the poorer countries. Salt is a very important article of produce. Large tracts are impregnated with it, especially about Punchpuddur, on the Loonee towards Cutch. It is got by digging pits of about 120 ft. by 40, and about 10 ft. deep in the saline soil. A jungle shrub is then thrown in upon the water which exudes; this assists the crystallisation, and in the course of two years, the moisture having evaporated, a mass of salt, sometimes from 4 to 5 ft. deep, is left. The commerce of Joudpoor is extensive, its great emporium being Pallee, about 40 m. SE. of the cap. This town is the entrepôt between the W. coast and Upper India, and the channel by which the Malwah opium is exported to China and W. Asia. The chief trade of Pallee is in opium, which is sent by land to Kurachee in Sinde, a distance of 500 m., whence it is shipped to Damaun. It is customary with the Pallee merchants to consign their opium to contractors, who agree to deliver it safe at Damaun, uninjured by weather, plunder, or otherwise, on the receipt of 300 rupees for each camel-load. Marwar exports wheat of superior quality to Ajmere and Bicanere, and has most extensive dealings in salt, with which it supplies the upper provs. of Bengal, and, indeed, all parts of Upper India. It imports from Sinde, by its return camels, rice, assafœtida, and sulphur; from Lahore, Cashmere shawls; from Delhi and Jeypore, metals, woollen and cotton cloths, and sugar. From Cutch it receives spices, cocoa-nuts, coffee, and dates; ivory from Africa, and European goods from Bombay. Its commercial importance has risen wholly within the last seventy years. The inhab. are chiefly Rhatore Rajpoots, a handsome and brave race of men of the purest castes. Bhats, Chunars, and Jauts, the last of whom are the cultivators, comprise most of the remaining inhab. Within the limits of Marwar there are several thousand towns and villages, many consisting of from 500 to 1,000 houses. Chief towns, Joudpoor, the cap., Pallee, Nagore, and Meerta.

JOUDPOOR, a town of Hindostan, prov. Rajpootana, cap. of the above rajahship; in a hollow surrounded by rocky eminences, and on a soil destitute of water; 100 m. W. Ajmere. Pop. estim. at 80,000. Near it is the residence of the rajah of Joudpoor, a fort about ¾ m. in circuit, placed on a low mountain, and said to have some resemblance to Windsor Castle.

JUAN-DEL-RIO (ST.), a town of Mexico, state of Querétaro, and cap. dist. of its own name, 81 m. NW. Mexico, and 164 m. SW. Tampico. Pop. 10,295 in 1864. It is a neat and tolerably well-built town, in an extensive plain, 6,490 ft. above the sea, and on the S. bank of a stream, crossed here by a fine bridge of 5 stone arches: S. of it rises a hill of basaltic rock, the summit of which is crowned with a pretty chapel and spire. The private residences are of stone, and are large, roomy, and well furnished. The town is surrounded by gardens and orchards; and nothing can exceed the beauty and fertility of the neighbouring country. Indian corn is the chief article of culture, but the ear is much smaller than that of the corn grown in the United States.

JUAN-DE-LA-FRONTERA (SAN), a town of the Argentine republic, near the Chilian frontier, cap. prov., and on the river of same name, 125 m. N. Mendoza. Pop. estimated at 16,000. The territory round San Juan, besides being highly productive, has the advantage of being free from the incursions of the Indians. The prov. San Juan produces wheat, barley, maize, olives, figs, pasturage, garden vegetables, and all the fruits of the temperate zone in great luxuriance; and, in times of scarcity, corn has been sent from San Juan to Buenos Ayres, a distance of above 1,000 m. The mountain ranges in the neighbourhood of San Juan yield fine statuary marble, gypsum, sulphur, alum rock, and copperas, and the earth in its vicinity is strongly impregnated with sulphate of soda, which is extracted by washing for medical purposes.

JUAN-FERNANDEZ, a group comprising two chief and several smaller islands in the S. Pacific Ocean, about 400 m. W. of the coast of Chili: lat. 33° 40′ S., long. 79° W. The largest of these islands, and the only one inhabited, is called *Mas-a-tierra*, to distinguish it from *Mas-a-fuera*, a lofty volcanic rock, about 90 m. W. It is from 10 to 12 m. long, and about 6 m. broad, its area being nearly 70 sq. m. The coast line is very irregular, with frequent bays and headlands; and the chief harbours are Port English, on the S. side, visited by Anson in 1741; Port Juan, on the W.; and Cumberland Bay, on the N. side of the island. Its northern half is a lofty basaltic formation, intersected with narrow, but fruitful and well-wooded, valleys while to the S. the land, though less elevated, is rocky and barren. The fig and vine flourish on the hill sides, and among the larger trees are the sandal, cork, and a species of palm called *chuta*, bearing a rich fruit. Goats are found in a wild state, and on the rocky shores are seals and walruses: fish are plentiful, especially cod. The island is very subject to earthquakes, two of which (in 1751 and 1835) are described as having done great damage. In the earthquake of 1835, an eruption burst through the sea about a mile from the land, where the depth is from 50 to 80 fathoms; smoke and water were ejected during the day, and flames were seen at night. (Geog. Journ., vi. 1.)

Juan-Fernandez (which is popularly applied only to the island of *Mas-a-tierra*) was discovered by a Spanish navigator, who gave to it his own name, and formed an establishment, which was afterwards abandoned. The buccaneers of the 17th century made it a place of resort during their cruises on the coast of Peru; and subsequently it became the solitary dwelling, during four years, of a Scotchman, called Alexander Selkirk, whose adventures are supposed to have given rise to De Foe's inimitable novel of *Robinson Crusoe*. In 1750, the Spanish government formed a settlement and built a fort; which, however, with the town, was all but destroyed by an earthquake in the following year. They were rebuilt somewhat further from the shore; and were still inhabited, and in good order, when Carteret visited the island in 1767, but they were soon after abandoned. (Geog. Journ., iv. 2.) The Chilian government established a penal colony here in 1819; but this has been discontinued, on account of its expense. The island has lately been taken on lease from the Chilian government by an enterprising American, who has brought thither about 150 families of Tahitians, with the intention of cultivating the land, rearing cattle, and so improving the port of Cumberland Bay, that it may become the resort of whalers and other vessels navigating the Pacific Ocean.

JUANPORE, a distr. of British India, prov. Allahabad, chiefly between the 25th and 26th degs. of N. lat., and the 82d and 83d of E. long.; having N. Oude, and the distr. Azimghur; E.

Digitized by Google

Benares; S. the Ganges, separating it from Mirzapoor; and W. Allahabad. Area, 1,552 sq. m. Pop. 798,503 in 1861. The surface of the district is slightly undulating. The river Goompty runs through it in a SE. direction. The soil is sandy, but generally well cultivated, and irrigated with care, except towards the Oude frontier, where there is much waste land covered with jungle. This distr. has improved greatly since it has been brought under the British government, and it is now the principal seat of the sugar cultivation in the central provs. of the Bengal presidency. Some sugar lands in Juanpore let as high as 10 rupees the begah, from 6 to 8 rupees being the average rent of sugar lands in the adjacent districts. The buildings and villages, though still very indifferent, have been latterly much improved. The land is generally divided into such small portions, that the incomes of very few landholders exceeded 50*l*. Education is at a low ebb, and the people have always been rather celebrated for turbulence. The remains of many mud forts are to be seen, but none of stone exists, except that of the cap., Juanpore.

JUANPORE, a town of British India, presid. Bengal, cap. of the above distr., on the Goompty, 38 m. NW. Benares. Pop. 27,200 in 1861. Though now decayed and comparatively insignificant, it was previously to the middle of the 15th century a place of importance, and the cap. of an indep. sovereignty. It was annexed to the Mogul empire by Akbar, under whom was built its magnificent bridge over the Goompty, which is now in perfect preservation, and is one of the finest works of the kind in India. A stone fort, a mosque of great beauty, and a number of ruined edifices and monuments, attest the former greatness of Juanpore. The modern town is wholly built of mud; it is, however, the residence of the collector, judge, and other chief British authorities of the district.

JUGGERNAUT (*Jaggannat'ha*, 'the lord of the world'), a town and celebrated temple of Hindostan, the latter being one of the chief places of Hindoo pilgrimage, and according to Hamilton, the most sacred of all the religious establishments of the natives of India. The town stands on the sea coast of the distr. of Cuttack, presid. Bengal, prov. Orissa, beside a branch of the Mahanudda, 45 m. S. Cuttack, and 260 m. SW. Calcutta; lat. 19° 49′ N., long. 85° 54′ E. It contains nearly 5,800 houses, with 30,000 inhabs. It is for the most part mean and dirty, consisting of low brick buildings, with here and there latge *serais* and some handsome residences. The chief street is wholly composed of religious edifices, interspersed with plantations; and at its S. end stands the great temple of the divinity or idol. This structure is imposing only from its immensity; its execution is rude and inelegant, and its form unpleasing to the eye. It is built of coarse red granite, and was completed in 1198, at a cost of from 40 to 50 lacs of rupees (400,000*l*. to 500,000*l*.) The establishment of which it forms a part comprises about 50 temples dedicated to various deities, within a nearly square area inclosed by a stone wall 24 ft. high, and measuring 676 ft. in length on two of its sides, and 670 ft. on the two others. The principal gate of entrance to this area is on the E. side, from which a broad flight of 22 steps leads to a terrace raised about 25 ft., and inclosed by a second wall 445 ft. square. On this terrace is the first apartment, called the Bhog Mandap, a building 60 ft. square, in which the great idol is worshipped during the bathing festival; and in a line, and connected with it by a low portico, is the antechamber opening into the great tower or sanctuary. This tower rises to 180 ft. above the area on which it is raised, or rather more than 200 ft. above the ground, and forms a valuable landmark to mariners on this dangerous coast. Its ground plan is 28 ft. square within the building; its shape is conical, its walls are externally covered with stone statues in relief, and its roof is ornamentesi with representations of monsters of various kinds. Little pains, however, appear to have been taken in the sculpture of these decorations, and of late the temple has had an outer coating of *chunam* or mortar, while its figures have been daubed with red paint. Within this sanctuary, seated on their thrones, are the rude statues of three of the most revered deities of Hindoo faith—Juggernaut or Vishnu, his brother Balarama or Mahadeo, and his sister Subhadra or Kali, the temple being devoted to all three, though particularly to the first. Adjacent to this edifice are two other temples, much smaller, and of a pyramidal form. The E. gate of entrance to the outer enclosure is flanked by colossal figures of lions or griffins in a sitting posture, and porters of Hindoo mythology. In front of it is a column, remarkable for its light and elegant appearance, composed of a single block of dark basalt, 40 ft. high and 8 in diameter, supporting a sitting figure of the god Huniman. This pillar was brought thither from the half ruined black pagoda of Kanarak (which see), less than a century since. On the NE. side of the temple is the collection of bungalows forming the European station.

All the land within a distance of 20 m. from the pagoda is accounted holy by the Hindoos, and is held rent-free by the cultivators and others, on condition of their performing certain services in and about the temple. The priests and other persons deriving their subsistence from the establishment, are said to amount to 3,000 families, exclusive of 400 families of cooks, to prepare the holy food so much sought after by pilgrims.

'The provisions furnished daily for the *idol* and his attendants consist of 220 seers of rice, 97 seers of *kallai*, 24 of *mung*, 188 of clarified buffaloes' butter, 90 of molasses, 35 of vegetables, 100 of milk, 13 of spices, 20 of salt, and 22 of lamp oil. The holy food is presented to the idol three times a day, and the gates are cautiously shut during this presentation, and none but a few personal servants of the idol are allowed to be present. This meal lasts for about an hour, during which period, the dancing-girls attached to the temple (consisting of 120), dance and sing in the room with many pillars. On the ringing of a large bell, the doors are thrown open, the food is removed, and the rajah of *Khurda*, as high priest of the temple, divides it with the priests.' (Trans. As. Soc., iii. 255.)

The images of Juggernaut, Balarama, and Subhadra, are nothing more than wooden busts, about 6 ft. high, fashioned into a rude resemblance of a human head, resting on a sort of pedestal. They are painted white, black, and yellow respectively, with grim distorted features, and decorated with different coloured head-dresses. The two brothers have arms projecting forward, horizontally, from the ears: the sister is without arms. These monstrous figures may, in general, be seen daily, and are publicly exposed twice a year; when Juggernaut and his brother, after undergoing certain ablutions, assume the form of Ganesa, the elephant-headed god, a transformation effected by means of a mask. Thus dressed, they are placed on the high terrace, overlooking the outer wall of the temple, surrounded by crowds of priests, who fan them to drive away the flies, whilst the multitude below gaze in stupid admiration. But the grand festival, or *rat'h iatra*, takes place in March, when the

Digitized by Google

sun has entered Aries. This has been described as follows, by a British eye-witness, for some years resident at Poori, Juggernaut. 'Three large *rat'hs*, or cars of wood, are prepared for the occasion, of which the first (intended for Jaggannat'ha) has 16 wheels, each 6 ft. in diameter; the platform, to receive the idol, is 26 ft. square, and the whole car is fully 45 ft. from the ground. The wood-work is ornamented with images of different idols, and painted, and the car has a lofty dome covered with English woollens of the most gaudy colours, bought at the import warehouse in Calcutta; a large wooden image is placed on one side as a charioteer, and several wooden horses are suspended in front of the car with their legs in the air. (An exact model of the car of Juggernaut, about 3 ft. square and 4 ft. in height, is in the museum of the Royal Asiatic Society.) Six strong cables are fastened to the *rat'h*, by which it is dragged on its journey. The concourse of pilgrims is always very great, and a loud shout from the multitude announces the approach of Jaggannat'ha, who is carried from the temple by a number of priests, appointed for the purpose. A short time after, the rajah of Khurda, as hereditary high priest, makes his appearance in a state-palanquin of a strange construction, followed by large state elephants, and generally alights near the rat'h of the idol Balabhadra. The latter, and Subhadra, are placed upon two separate rat'hs, like that of Jaggannat'ha, except being a little smaller, the one having only 14 wheels, and the other 12. The rajah is surrounded by a large train of priests, and immediately prostrates himself before the idol Jaggannat'ha, amidst the shouts of pilgrims and the piercing notes of the shrill silver trumpets; he then with a broom sweeps the floor of the car, and is presented by the priests with a silver vessel, containing essence of sandal-wood, with which the floor is sprinkled all around the idol. The rajah receives from Jaggannat'ha, as a mark of honour, a garland of flowers, which the priests take from the image, and put round the rajah's neck. The rajah then descends from the principal car, and proceeds bare-footed to the car of each of the other idols, and endeavours to propel them forward, without which ceremonies it is supposed they could not afterwards be moved. On a signal being given, a most active scene commences, and several thousand men, each holding a small green branch in his hand, come running to the ra'ths, clearing their way through the crowd for a considerable distance in regular files. They immediately lay hold of the cables, each man having first touched the car with his branch; and then aided by the pilgrims (men and women), pull the rat'hs to their destination, taking care to keep their faces towards the idol, who is driven to his garden-house, where he is worshipped for four days, and then returns in the same way to the temple.' (Mansbach in Trans. Asiat. Soc., iii. 258–259.) Besides that described, 12 other principal, and many minor, festivals are celebrated during the year. The worship of Juggernaut is attended by every sect and class of Hindoos, who meet on equal terms, *all caste being abolished within the precincts of the temple.*

That excess of fanaticism, which is said to have prompted the pilgrims to court death by throwing themselves, in crowds, under the wheels of Juggernaut, either never existed, or has long ceased to actuate the worshippers of the idol. During four years that Mr. Mansbach witnessed the festivals, only three cases of self-immolation occurred; one of these was probably accidental, and the two others were suicides, committed by sufferers to rid themselves of painful diseases. The greatest misrepresentations were formerly circulated in Europe respecting the number of widow-burnings, pilgrims, and loss of life, at Juggernaut. It is true that, for many miles round the temple, the sides of the roads are literally whitened with the bones of devotees, who have perished by the way-side. But this is not the result of any violent modes of destruction, voluntary or otherwise. If a Hindoo has reason to believe dissolution at hand, he forthwith collects his remaining strength, and should he fortunately succeed in dragging his diseased body within sight of the sacred edifice, he will lie down in peace, and die with a perfect confidence of future happiness; besides which, thousands set out on a pilgrimage thither in health, and in the full intention of returning, whose subsistence failing by the way, devote themselves, simply because they can do nothing else, to death by starvation. An unfounded clamour was long raised in England against the government of British India for promoting idolatry, as it was said, by continuing to exact taxes on the pilgrims to Juggernaut, Gaya, and other places, as had previously been done by the native sovereigns. But though the levy of taxes on pilgrims seems rather an odd way of promoting idolatry, yet, in deference to the well-intentioned, though absurd, misrepresentations propagated in England on the subject, these taxes have been repealed, to the great satisfaction of the 'idolaters.' The number of pilgrims to this and other shrines has since greatly increased; and the natives are extremely well pleased by this act of liberality on the part of government. It may be right to mention that no part of the pilgrim-tax ever came into the general funds of the government, but was wholly laid out on the repair of roads, and the maintenance of a proper police at the different places of pilgrimage. (Asiatic Researches, vols. viii. x. xv.; Trans. of the Royal Asiat. Soc., vol. iii.)

JULIERS (Germ. *Jülich*), a town of Prussia, cap. circle, on the Roër, a tributary of the Maese, 23½ m. W. Cologne, and 16½ m. NE. Aix-la-Chapelle, on the railway from Aix-la-Chapelle to Cleves. Pop. 5,181 in 1861. The town has a strong citadel, 3 churches, a fine old town-hall, circle court of justice, police court, and high school, and manufactures of woollen cloth, leather, and vinegar.

Juliers is believed to be identical with *Juliacum*, in Antonine's Itinerary. After the extinction of the Roman dominion, it became the property of independent counts of the Germanic empire, who were created dukes by the emperor Charles IV., in 1356. The family of the dukes of Juliers becoming extinct in 1609, the town was taken by Prince Maurice of Nassau in the following year; in 1622 it was taken by the Spaniards, who held it till 1659. In 1794 it was taken by the French, who afterwards made it the cap. of the dép. Roër. The former duchy of Juliers is the most W. portion of the Prussian dom., and is remarkable for its fertility, and its linen manufacture.

JUMBOSEER, a town of British India, presid. Bombay, distr. Baroach, on a river of the same name, 25 m. NNW. Baroach. Pop. estim. at 10,000. It carries on a considerable trade with Bombay, to which it sends cotton, grain, oil, and piece goods.

JUMILLA, a town of Spain, prov. Murcia, 36 m. N. by W. Murcia, and 75 m. SSW. Valencia. Pop. 9,613 in 1857. The town is situated on the S. slope of a hill, at the summit of which is a castle commanding the town; streets straight and of moderate width, but not paved. The public buildings comprise 2 churches, 2 convents, a public granary, and a hospital. The town contains about 30 oil and corn mills, 2 soap manufactories, and an establishment for making fire-arms; also

Digitized by Google

several salt-pans under the direction of government. A considerable fair is held here, Dec. 2. The climate, though not so genial as in neighbouring towns situated at a less elevation, is salubrious; and corn and fruit are abundant. Grazing, however, is the principal pursuit of the people in and near the town.

Jumilla was taken from the Moors, who, having founded or rebuilt it, gave it its present name, by a king of Arragon: it was again taken from Arragon by Henry of Trastamare, who made it subject to the crown of Castile.

JUMNA (Sanscr. *Yamuna*, the *Jomanes* of Pliny), a river of Hindostan, and the chief tributary of the Ganges. It rises on the SW. side of the great Himalaya range, about lat. 30° 55′ N., and long. 78° 24′ E.; and has been traced to an elevation of about 11,200 ft. above the sea, at the foot of an abrupt mountain nearly 4,000 ft. higher. Over the wall of this mountain falls a streamlet, probably caused by the melting of the snows on the summit, and which appears to be the true source of the river. For some miles the Jumna proceeds through a glen no more than about 40 yards in width at its bottom, and bounded by mural precipices of granite many thousand feet in height. The stream is here concealed by a thick bed of frozen snow, which arches over the course of the river beneath, supported by the shelving walls of the ravine. About half a mile below the point to which the Jumna has been traced, is Jumnotri, a celebrated place of pilgrimage and ablution with the Hindoos. At this spot are numerous hot ferruginous springs, some of which rise in the rocky wall 10 or 12 ft. above the bed of the river; and having melted the snow for 20 or 30 yards round, mix with the waters of the Jumna, rendering them sensibly warm. Some of the springs are hot enough to boil rice, their temperature having been found as high as 194·7° Fah., or near the point at which water is converted into steam at that elevation, about 10,840 ft. above the sea. Before arriving at them, the Jumna is only about 3 ft. in width and a few inches deep; but these, causing a continual melting of the snow, contribute greatly to augment its supply of water. About 50 m. below its source, the Tonse unites with the Jumna; and, though double the size of the latter, takes its name. From this point to Delhi the river flows generally in a S. direction; it thenceforward gradually declines to the SE. Throughout its whole course it usually runs parallel to the Ganges, the tract between the two rivers, called the *Doab*, varying from 20 to 80 m. in width. At its emerging from the hilly region, about lat. 30° 15′, the bed of the Jumna, which is 1,000 yards broad, is full in the rains, though in the dry season the river is not more than 100 yards across. It is not usually very deep, being fordable in several places above Agra; in its progress through the prov. of Delhi it divides into various branches inclosing large islands. It joins the Ganges at Allahabad, where its breadth is fully equal to that of the latter river. Its entire length is estimated at 780 m. It receives no tributaries of any consequence in the upper part of its course; but in the lower, the Chumbul, Sind, Betwah, and Cane join it from the S., and the Rinde from the N. Delhi, Agra, Allahabad, Etaweh, and Kalpee are on its banks. From its shallowness, the Jumna is little serviceable to commerce, and its waters in the great plain of the upper provs. are so impregnated with natron, that vegetation is rather hindered than promoted by its inundations. The country to the W. of Delhi is, however, fertilised by the canal of Ali Mordan Khan, cut from it immediately after its leaving the hills; and the upper portion of the Doab is irrigated in a similar manner by the Zabeta Khan's canal, 200 m. in length, which also commences at the foot of the hilly region, and proceeds to Delhi.

JUNGEYPOOR, a town of Hindostan, prov. Bengal, distr. Moorshedabad, on an arm of the Ganges, 25 m. NNW. Moorshedabad. It is one of the principal stations in the British territories for the culture of the silk-worm. The mulberry is cultivated to a great extent from annual shoots, and large quantities of indigo are also grown in the neighbourhood.

JURA, a frontier dép. of France, region of the E., formerly included in Franche Comté, between lat. 46° 16′ and 47° 18′ N., and long. 5° 19′ and 6° 12′ E., having N. Haute Saône, E. Doubs and a part of Switzerland, S. Ain, and W. Saône-et-Loire and Côte d'Or. Length, NW. to SE., 70 m. Area, 499,401 hectares; pop. 298,053 in 1861. More than two-thirds of the surface, principally in the S. and E., is covered with mountain ranges belonging to the Jura system, the principal summit of which, the Reculet, 5,633 ft. high, is in this dép. Rivers numerous: the chief are the Doubs and Ain. There are several small lakes, and in the NW. some large marshes. In the plains the atmosphere is moist and heavy, while in the mountains it is dry, and the winters long and severe. The arable lands are estimated at 183,113 hectares; meadows at 50,547; vineyards at 21,027; forests at 115,614; and heaths and wastes at 79,000 do. Sufficient corn is grown for home consumption, chiefly wheat, barley, maize, and oats. Upwards of 400,000 hectol. of wine are produced annually, some of which is very good. The mountains afford excellent pasture, on which many black cattle are fed; and *châlets* are established on them, as in Switzerland. The butter and cheese of the dép. are much esteemed. Horses and mules are extensively bred; and hogs, poultry, and bees are also very plentiful. The number of large properties is much below the average of the déps. There are several iron mines, and quarries of marble, alabaster, and gypsum. The dép. has also ores of lead, coal, copper, and even gold, but no mines of these metals are at present wrought. Iron forges and paper factories are numerous; cotton and linen fabrics, chamois and other leather, glue, mineral acids, and marble ornaments, are among the other chief manufactures. Watches and trinkets are made at Morez, and ivory, bone, horn, marble, and wooden articles are sent all over Europe from the turning establishments of St. Claude. Jura is divided into 4 arrond.: chief towns, Lons-le-Saulnier, the cap., Dôle, Poligny, and St. Claude.

JURA MOUNTAINS, a chain of Central Europe, usually classed with the Alpine system, and including the mountains of W. Switzerland, and those between the Lake of Geneva, the Rhone, the Saone, and the Doubs. The range commonly thus designated has a length of about 160 m., with an average breadth of 30 m., commencing S. on the banks of the Rhone, and running NE. to the junction of the Rhine and Aar; but connected mountains of analogous composition run N. through Suabia and Franconia, and SW. along the right bank of the Rhone to the vicinity of Narbonne, so that the Jura range, in its most extended sense, has a length of about 600 m. The Swiss Jura consists of several long parallel chains, inclosing narrow longitudinal valleys, such as the Val de Joux (in which is the mountain-lake of the same name, 3,260 ft. above the sea), the Val Travers, the Val de Ruz, and the valleys of the Valserine, Doubs, Birs, and other rivers. Transverse valleys, similar to those in the main Alpine system, are of rare occurrence, and the range throws off only one lateral spur, viz. the chain of Mount Jorat, passing

Digitized by Google

between the lakes of Geneva and Neuchâtel, and joining the Bernese Alps. The slope is rapid on the Swiss side, but more gentle towards France; and the ridge, as seen from a distance, presents a regular undulating line with rounded dome-like summits, contrasting strongly with the abrupt crags and towering peaks of the Alps. The chain sinks, as it advances N.: the culminating point, *le Reculet*, is 5,633 ft. high, and 8 others rise above 5,000 ft.: the roads across the ridge have an elevation varying from 3,600 to 2,500 ft. above the sea. Snow lies on the highest ground about seven months in the year, and there are no glaciers. The geological constitution of the Jura mountains is limestone of the oolitic series. The strata comprises most of the varieties lying between the lias and the compact limestone, answering to the Portland stone of English geologists; and the beds are thrown up at high elevations, thus causing the formation of those longitudinal valleys which are a characteristic feature of the Jura. On the SE. slopes, and, as Lyell observes, exactly opposite the principal openings by which great rivers descend from the Alps, lie numerous 'erratic' blocks of extraordinary magnitude. How these granite fragments came to their present situation is wholly matter of conjecture; but if it be true, as Lyell supposes, that the limestone layers of the Jura were upraised by some internal commotion, it is not improbable that these boulders were detached from the Alpine summits, and transported to lower platforms, which have been subsequently elevated. (Princ. of Geol., vol. iii. p. 424.) The vegetation of the Jura nearly resembles that of the Alps: box-trees are very abundant on the NW. side, and the hills near Poligny are covered with firs, the timber of which furnishes materials for the industry of the pop. during the winter months, and is also a considerable article of trade with the surrounding districts. Many of the villagers, also, on the mountain sides, and in the valleys, are employed in making watch-movements, which find a ready market at Geneva and other towns.

JUTLAND, a large prov. of Denmark, formerly comprising the whole continental portion of the Danish dominions, but which is now restricted to the part of the peninsula belonging to Denmark to the N. of Schleswig, extending from about 55½° to nearly 58° N. lat., being about 170 m. in length, and from 60 to 80 in breadth, comprising an area of 9,550 sq. m. Pop. 611,552 in 1860, of whom 92,061 in the towns. The province is of an oblong form, with the addition of a triangle towards the N. Surface generally flat. It has few rivers, and none of any considerable magnitude; but it is deeply indented, and in part traversed by inlets or arms (fiords) of the sea. Soil various. In the middle it is dry, sandy, and occupied by extensive heaths; on both shores it is more fertile; and on the W. coast, particularly towards the S., there are large tracts of very rich marsh-land, defended by dykes from being overflowed by the sea. Agriculture, though still backward, has made great progress during the present century. Rye, oats, and buckwheat are the crops most generally raised; and they, along with cattle of excellent quality, horses, and butter, form the principal articles of export. Hogs are very plentiful, and Jutland has sometimes been called 'the land of bacon and rye bread.' Fish very abundant in the fiords or inlets of the sea. Minerals and manufactures unimportant. The principal towns are Aalborg, Aarhuus, and Wyborg

K.

KAFFA, or THEODOSIA, a sea-port town of European Russia, on the SE. coast of the Crimea, lat. 45° 1′ 37″ N., long. 35° 23′ 37″ E. Pop. 7,580 in 1858. The town is believed to stand on the site of the ancient Theodosia, founded by Milesian colonists in remote antiquity. The Athenians carried on a great trade with this city, importing from it vast quantities of corn, with slaves, lumber, and naval stores, hides, and honey. After undergoing many revolutions, it fell, in the 13th century, into the possession of the Genoese, who rebuilt it, and made it the chief seat of their power during the lengthened period of their ascendancy in the Black Sea. In 1475 it was taken by the Turks; but it continued, down to its conquest by the Russians, to be a large, populous town. It, however, suffered severely from this event, partly in consequence of the devastations committed by the Russian soldiery, and partly through the emigration of its Tartar inhab. Latterly, however, it has begun to revive; though, owing to the superior advantages enjoyed by Kertsch as an *entrepôt* for the trade of the sea of Azoff, it does not seem very probable that Kaffa will ever recover her former importance. The road, or bay, of Kaffa is very extensive, and capable of accommodating a great number of vessels. It has deep water throughout; the holding ground is good; and, with the exception of the E., it is sheltered from all winds.

KAIRA, a town of Hindostan, cap. of a collectorate, 113 m. NNW. Surat; lat. 22° 47′ N., long. 72° 48′ E. It is a neat town, surrounded by bastioned ramparts and walls in good repair. Its streets are narrow, but tolerably clean, and its houses are solid, lofty, and adorned with a great deal of carving. Its chief public buildings are the district court-house, a handsome Grecian edifice, a large and secure prison, a church, an English school, and, near the centre of the town, a large Jain temple. The cantonment of Kaira, about 1½ m. distant, is unfortunately (like many of the settlements in India founded by the British), in a very unhealthy situation; but it is extensive and well laid out, with good barracks, a hospital, a regimental school, and a tolerable English library.

KAIRWAN, or KEERWAN, a large city of N. Africa, regency Tunis, 85 m. S. from the city of Tunis; lat. 35° 36′ N., long. 9° 57′ E. Pop. estimated at 50,000. It is situated in a barren sandy plain, and is surrounded by a low wall; the public buildings comprise a large citadel and several mosques, two of which are richly adorned. The houses are clean and respectable, and the streets wide and ornamented with columns, capitals, and highly raised Cufic inscriptions. It is regarded as the second town in the regency; and its Kadee, or governor, is almost independent of the bey of Tunis.

Kairwan is famous for its yellow Morocco boots and slippers, the delicate dye of which it has hitherto been found impossible to equal. It was formerly a place of great literary eminence, possessing well-endowed institutions and good libraries, from which Europeans have derived a large portion of their knowledge of Arabic literature.

Digitized by Google

Kairwan is supposed by Shaw to occupy the site of the *Vicus Augusti* in Antonine's Itinerary; but, notwithstanding the deference due to so great an authority, this supposition is contested on good grounds. The present city was built about A.D. 670, about the time when Africa was invaded by the general of the Ommiyade, caliph Moawyad I. In 802, the governor of W. Africa threw off his allegiance to the caliph, declared himself independent, and established his capital at Kairwan. In 969, the seat of government was transferred to Cairo, since which its importance, though still considerable, has materially declined.

KAISARIAH (an. *Mazaca*, and afterwards *Cæsarea*), a town of Asiatic Turkey, prov. Karamania, sandjiak of its own name, on the Karasa (an. *Milas*), a tributary of the Euphrates, 140 m. ENE. Konieh, and 135 m. SE. Angora; lat. 38° 42′ N., long. 35° 20′ 20″ E. Pop. about 25,000, of whom 2,000 are Armenians, Greeks, and Jews. It is situated on the E. side of a fertile plain of great length, and in a recess formed between two spurs projecting from the lofty, snow-covered Mount Erdjisk, the *Argæus* of antiquity. The houses, though built of stone and brick, have a mean appearance. It is surrounded by a wall now in ruins, and in the suburb are some interesting remains of a Roman city. Several mosques, one Greek and two Armenian churches, a convent, and some mausoleums, are the chief public buildings. Kaisariah is the emporium of an extensive trade, and the resort of merchants from all parts of Asia Minor and Syria, who come to purchase cotton, cultivated in the vicinity in great quantities, and sold either in a raw state, or when manufactured into cloth. Cotton thread and cloth constitute the chief articles of industry, and there are some tanneries of yellow Morocco leather. The land in the neighbourhood is fertilised by the inundations of the Karasa, and produces an abundance of large and delicious-flavoured fruits and vegetables. The climate is very healthy, except within the town, where epidemics prevail, owing to the offal left in the streets to decay and infect the air.

Mazaca, the ancient capital of Cappadocia, took the name of Cæsarea in honour of Tiberius. Its antiquity is attested by Strabo, who also gives an excellent description of the neighbouring mountain. It was the residence of the kings of Cappadocia previously to its being annexed to the Roman empire, after which it continued to increase in size and beauty. An amphitheatre and many temples were erected; and in the reign of Valerian, when Shapoor I., king of Persia, pillaged the city and massacred its inhabs., it is said to have had a pop. of 400,000 persons, though this is most probably beyond the mark. (Gibbon, i. 439.) Its dimensions were contracted by Justinian, who rebuilt the walls: it was raised to the dignity of an apostolic see, and gave birth to St. Basil. Having been destroyed by an earthquake, it was afterwards rebuilt, and by turns became subject to the sultan of Iconium, the princes of Karaman, and the grand seignior.

KAISARIAH, a ruined town and sea-port of Palestine. (See CÆSAREA.)

KALISZ, a city of Poland, and the most westerly in the Russian dominions, cap. palat. of the same name, on an island in the Prosna, immediately within the Russian frontier, 128 m. WSW. Warsaw, and 70 m. SE. Posen. Pop. 12,253 in 1858, of whom about one-fourth are Jews. Kalisz is surrounded by old walls flanked with towers, and entered by five gates, and has a citadel founded by Cassimir the Great. Its streets are broad and well paved, and several are planted with trees: its houses are generally good. The most remarkable public edifices are the former palace of the voivodes, now occupied by the courts of law, the cathedral, church of St. Nicholas, and the Lutheran church. Besides the cathedral, there are five R. Catholic churches and six convents, several synagogues, a R. Catholic gymnasium or lyceum, with a fine library and large scientific collections, a military school with 200 students, and many elementary schools. It has also a theatre, a house of charity, and three hospitals. Kalisz is a town of some industry, having manufactures of linen and woollen cloths, and leather. A fine road leads to Opatowek, a village about 6 m. distant ESE., celebrated for its large manufacture of woollens, and its gardens, which form the favourite resort of the inhabitants of Kalisz.

The city was founded about 655, and was long the residence of the dukes of Great Poland. Near it, in 1706, the Poles totally defeated the Swedes; and in Sept. 1835, a grand military muster and review took place at Kalisz, attended by the sovereigns of Russia, Austria, and Prussia.

KALPEE, or CALPEE, a large and populous town of British India, presid. and prov. Agra, on the S. bank of the Jumna, 45 m. SW. Cawnpore. It is a place of considerable trade, being an entrepôt for the transport of cotton from the SW. of India to the Gangetic provs.; and has also manufactures of sugar-candy and paper.

KALUGA, a government of Russia in Europe, near its centre; chiefly between lat. 53° 30′ and 55° 30′ N., and long. 33° 40′ and 37° E., having W. the gov. of Smolensk, N. the latter and Moscow, E. Tula, and S. Orel. Area, 11,470 sq. m. Pop. 1,007,471 in 1858. Surface an almost uninterrupted plain, watered by numerous rivers, of which the Oka and its tributaries are the principal. Climate tolerably mild for the lat. Soil mostly either sandy or hard clay, and not fertile. Forests occupy more than half the surface; arable lands rather more than two-fifths; but a good deal of manure is required to render the latter even moderately productive, and the agricultural produce is not adequate to the consumption of the inhabitants. Rye is principally grown; but oats, wheat, and barley are also cultivated; as are hemp and flax. Cattle not numerous, and but little valued; but there are in the gov. two extensive studs for the breeding of superior horses. The fisheries are insignificant: little game is met with. Bog-iron is found, but in no great quantity, and a good deal has to be imported to supply the various iron works. This government being so little suitable for agriculture, the attention of its inhabitants has been turned towards manufacturing industry; in this respect Kaluga ranks immediately after the governments of Moscow and Vladimir. On an average about 20,000 workmen are employed in distilleries and manufactures of sail-cloth, linen and cotton goods, leather, soap, candles, and hardware. The manufacture of beet-root sugar has been lately introduced. Nearly all the peasants' families employ a considerable portion of their time in weaving. Many of the merchants in this government are opulent, and some have commercial transactions with foreign countries, through Archangel. The chief exports are oils, spirits, potash, honey, linen, sail-cloth, and other manufactured goods. The chief commercial towns are Kaluga and Borofsk. Kaluga is divided into 11 districts, and is under the same military governor with Tula. Its scholastic institutions are under the university of Moscow.

KALUGA, a town of Russia in Europe, cap. of the above government, on the Oka, near where it suddenly turns eastward, 105 m. SE. Moscow. Pop. 32,335 in 1858. The town is said to occupy

Digitized by Google

a space of 10 versts, or little short of 7 m., in circ., and is divided into three quarters by the Oka and its tributary the Kaloujeka. It is an ill built place, with narrow, crooked, and ill paved streets and wooden houses. There are, however, some good public edifices, as the high church, government-house, town-hall, and theatre. Of the 24 churches, 23 are of stone; a convent, also a stone building, gymnasium, seminary for poor children of noble birth, foundling asylum, several workhouses and hospitals, and a house of correction, are the other chief public establishments. Kaluga is one of the most important manufacturing and commercial towns in the empire: it has 5 sailcloth factories, employing 400 weavers and 1,000 spinners, between 30 and 40 oil factories, numerous tan-yards, some sugar refineries, and manufactures of woollen cloth, cotton fabrics, hats, paper hangings, earthenware, soap, and vitriol. Besides carrying on an extensive internal trade, its merchants make large exports of lamb-skins, Russia leather, and wax, to Dantzic, Breslau, and Berlin.

KAMINIETZ (Polish, *Kaminiec Podolski*), a town of Russian Poland, gov. Podolia, of which it is the cap., on the Smotryez, about 12 m. from its junction with the Dneistr, 215 m. SE. Kief, and 300 m. NW. Odessa. Pop. 15,230 in 1858, many of whom were Jews. It is irregularly laid out, with narrow streets, and wooden houses. It has, however, some conspicuous edifices of stone and other solid materials; including the cathedral, dedicated to St. Peter and St. Paul, a Gothic building, containing fifteen altars and a nave supported by 150 columns. Near it is a column supporting a statue of the Saviour. The church of the Dominicans, originally constructed of wood, in 1360, was rebuilt in stone after the expulsion of the Turks in the 18th century. There are in all five R. Catholic and four Greek churches, and one Armenian church, a fine edifice, completed in 1767. The R. Catholics have several convents. The other chief public buildings are the government library, circle school, and new gymnasium, commenced in 1837.

The town was formerly walled, but its works were levelled, by order of the Russian government, in 1812. It is, however, still defended by a citadel and other fortifications. The former, situated on a steep isolated rock overlooking the town, might be made impregnable, were it not commanded by some more lofty adjacent heights. Kaminiec was, for a lengthened period, the principal bulwark of Poland on the side of Turkey. It was founded by the sons of Olgherd, in 1331, after that prince had wrested Podolia from the Tartars. It was soon after fortified, and in 1374 attained the rank of a city. It remained attached to Poland till its final capture by the Russians in 1793, except from 1672 to 1699, during which it was in the possession of the Turks.

KAMTSCHATKA, a large peninsula at the NE. extremity of Asia, forming a part of the Russian gov. of Irkutsk, and bounded N. by the country of the Tchuktchi, E. by the Aleutian archipelago, and W. by the sea of Okhotsk. It lies between the 51st and 62d parallels of N. lat., and the 166th and 167th deg. of E. long.; has a length of about 800 m., and a breadth varying from 100 to 250 m., the area being estimated at 80,000 sq. m. Supposed population 6,000, of whom about 1,500 are Russians. The coast line on the W. side is tolerably regular, the Gulf of Penginsky, at its N. end, forming the only considerable exception; but on the E. side are several extensive bays, enclosing respectively between the capes Chipunsky, Kronotzky, Kamtschatka, Ozernoy, and Olutorsky, the last of which is near the NE. end of the peninsula: C. Lopatka (lat. 51° 0′ 15″ N., long. 152° 2′ 15″ E.) is the S. extremity of Kamtschatka. The coast, generally speaking, is abrupt and rocky, especially on the E. side, and the peninsula, when viewed from the sea, presents the appearance of a barren and desolate rock; but in the interior there are plains of considerable extent, having a soil well adapted for tillage. The high lands, which cover about two-thirds of the entire surface, consist of a chain of volcanic mountains, running in a SSW. direction. Many volcanoes in this chain have been ascertained by Erman and Lutké to be in a high state of action; and it seems very probable that, geologically considered, they form only one extremity of a great volcanic belt, continued through the Kurile and Japanese islands, Formosa, and the islands of the E. Indian archipelago.

The following statements are drawn up from the observations of the naturalists in Commodore Lutké's expedition, in 1827-30, and of Prof. Erman, who visited Kamtschatka in 1829. In the main range running N. from C. Lopatka, 13 summits, with craters and hot springs, have been observed within the 51st and 56th parallels, one other height being isolated, and lying W. of the principal chain. The elevation of nine summits has been accurately measured, and is stated to be as follows:—

Assatchinsky	8,340 ft.	Kronotsky	10,610 ft.
Viltutchinsky	6,846	Klutchewsky	16,590
Avatcha	8,760	Tolbanchin	8,250
Koriata	11,120	Chevelutch	10,590
Juponov	9,060		

The most active are Assatchinsky, Avatcha, and Klutchewsky. The scoriæ and ashes thrown from the first, in 1828, were carried as far as Petropaulowsky, 120 versts distant; and it appears to be more or less in continual activity. In 1827 there was a violent eruption of Mount Avatcha, during which, besides lava and stones, a very large quantity of water was ejected; a phenomenon remarked also by Humboldt in the volcano of Karkuarizo, a little N. of Chimborazo, in the Colombian Andes, and known to have occurred, though in a less degree, during the eruptions of Etna and Vesuvius. At the summit is a crater several hundred yards in circ., formed by a wall 30 ft. high, composed of porphyry, felspar, and trachyte; and on the E. side, at an elevation of about 5,000 ft., is another crater, now extinct, and similar both in origin and appearance to the Somma of Mount Vesuvius. Klutchewsky, which, in common with six others, continually emits smoke, was during the last century in very violent action, sometimes for a year or two at a time, sending forth vitrified stones, lava, pumice, and water: after having been comparatively quiet for about 40 years, it broke out again during Erman's visit in 1829. It presents a large base, swelling in an elliptic curve, and crowned by four cones: its geological components are trachyte, Labrador felspar, obsidian, and lava, and on its sides are numerous thermal springs of high temperature. Indeed, the general formation of Kamtschatka is of igneous origin, comprising porphyry, jasper, felspar, schist, trachyte, and dolomite; the W. side, however, is composed of Neptunian, secondary, and tertiary rocks, among which may be distinguished various beds of lignites, sandstone, iron-sand, and chalk, in the last of which are found large quantities of yellow amber: fossil shells in great variety have been discovered in all the secondary and tertiary formations of this interesting peninsula. The shape of Kamtschatka precludes the possibility of there being any extensive rivers; and, accordingly, those met with resemble torrents more than rivers,

Digitized by Google

being either nearly dry, or flooded and rapid: the Kamtschatka river, however, is alleged to be capable of admitting vessels of 100 tons about 150 m. up the stream.

The severity of the climate, though considerable, has been greatly exaggerated. The average temperature in the middle of winter is about 10° Réaum.; that of summer is about 7°; but the difference seems greater, owing to the prevalence of raw piercing winds and thick fogs. Still, if any judgment may be formed from the health of the inhabs., it cannot be unwholesome, for they are robust and long-lived, and there are few diseases, except small-pox and syphilis, introduced by the Russians, who also corrupted the pop. by familiarising them with the use of ardent spirits. (Dobell's Travels, vol. i. p. 87.) The vegetation is generally considered to be very limited; but the limits are prescribed by man rather than by nature. Rye, barley, potatoes, cabbages, turnips, hemp, and flax, with several other plants peculiar to the country, may be raised successfully, with moderate attention: but the people are, with few exceptions, devoted to hunting, able to live on game and dried fish, and extremely loth to engage in the more civilising, though less exciting pursuit of agriculture, the first attempts at which date no further back than 1810. Among the fruits are the raspberry, red-currant, whortle-berry, cranberry, a delicious species of strawberry called *knejnika*, a wild cherry called *cheroonka*, and a kind of apricot or plum. The forest trees comprise the birch, fir, larch, poplar, cedar, willow, and juniper. Pasturage has hitherto been little followed; but the abundance of grass shows that if there was an inclination towards it, the pursuit would be profitable. The animals usually hunted comprise bears, lynxes, sea and river otters, reindeer, foxes of different colours, sables, and beavers, and the number of skins exported is supposed to average about 30,000 a year, chiefly of foxes and sables. Among the birds, the principal are moor-game of different kinds, and many varieties of waterfowl, the eggs of which, saturated with oil, constitute the chief food of the inhabs. The fish caught in the rivers comprise many varieties of salmon, some of which are peculiar to the country, all serving most essentially to supply winter food: the sea also abounds with cod, herrings, and seals; walruses and whales furnish oil, exclusively employed for domestic purposes.

The trade of Kamtschatka, owing to the exactions of the Russian governors, who, in consequence of their great distance from Petersburg, or even Tobolsk, have few checks on their own cupidity, is extremely limited. Taxes are taken in skins; and the people complain that no equitable system of taxation has been authorised by the imperial government. Hence, wholly left to the mercy of individual officers, they justly apprehend the insecurity of property, and want the chief motive for improving the natural resources of the country: labour is confined to the supply of merely temporary necessities, domestic comforts are little known or cared for, and affluence is scarcely ever attained even by the most provident and laborious. Furs and dried fish are exported from Petropaulowsky, chiefly by the Russians and Dutch, who bring in exchange rice, flour, coffee, sugar, brandy, and whisky.

The natives, comprising the two tribes of the Kamtschatdales and Koriaks, who differ more in mode of life than in physical conformation, are of low stature, but stout and broad in the shoulders, with large heads, flat and broad faces, prominent cheek-bones, thin lips, lank black hair, and eyes deeply sunk in the head. Their features seem to identify them with the Mongolian race, to which they are certainly more closely allied than to the Esquimaux, with whom some writers have erroneously classed them. The Kamtschatdales are described by Dobell as being shy and averse to strangers, but at the same time intelligent, and fully capable of improvement, if endeavours were made to instruct them in the arts of civilised life. Honesty, openness of character, and extreme hospitality are prevailing features among them; but it has been remarked by more than one traveller, that their morals have been much debased by the introduction of felons from Siberia, and the quartering of Russian troops at Petropaulowsky: drunkenness has since that period been an increasing evil, and now threatens to be as destructive to the Kamtschatdales as to the Indian tribes of N. America. Their employment, when not agricultural, is hunting and fishing. They live in fixed habitations; but their dwellings are low, comfortless, and extremely filthy, sunk in the ground in the winter months, and raised on posts during summer, to facilitate the curing of fish, which is hung up on lines to dry. In travelling they use dogs instead of horses. These animals somewhat resemble the English shepherd-dog, are extremely intelligent, and endure an almost incredible degree of labour and privation. They are fed during the winter, when they are principally used, on offal and decayed fish, and in the summer are allowed to roam abroad, and shift for themselves. Few Kamtschatdales have less than six, and some upwards of twenty, the whole number of dogs being estimated at 3,000. When used for draught they are harnessed, two and two to a sledge, one particularly well trained being placed in front as leader. The sledge is in the shape of an oblong basket about 3 ft. long, and raised 3 ft. from the ground: the driver usually sits sideways, like a lady on horseback, and urges the dogs by throwing at them a stick, which he afterwards catches with great dexterity. Occasionally parties travel in company; 'and then,' says Dobell, 'the eagerness and impatience of the dogs, and the rivalry of the *kyoorshiks*, or drivers, are worthy to be compared with the exertions of the high-blooded coursers of Newmarket; nor does the management and driving of the dogs require much less skill and attention than are needed in the latter case, to arrive at perfection, and gain the palm of victory.' The Koriaks, who inhabit the N. part of the peninsula, a wandering tribe, subsist on the produce of their herds of rein-deer, which they also use to draw their sledges. The number of Koriaks is unknown, and they are not included in the estimates of the population.

Kamtschatka was first known to the Russians in 1696, when Vladimir Atlassov invaded the peninsula, and made great part of it tributary to Peter the Great. The conquest was completed in 1706, since which, regular tribute has been paid, in furs, to the governor of Irkutsk. There are 4 districts, each of which is governed by a *toion*, or lieutenant, whose business is to preserve peace, enforce the orders of government, and collect the tribute, the quantity of which varies according to the character of the governor, and the favour which particular persons happen to enjoy. The commander of the troops resides at Petropaulowsky, which for some years has been the principal place. Its population, however, does not exceed 700, while that of Nishni-Kamtschatk, the former capital, has scarcely 150 persons. Bolcheresk, a small harbour on the W. side of Kamtschatka has a pop. of about 200. (Erman, Reise um die Erde, i. 415–420; Dobell's Kamtschatka, i. 1–188.)

Digitized by Google

KANDAHAR. See CANDAHAR.

KANNAGHERRY (*Khanagiri*), a town of Hindostan, prov. Bejapoor, formerly the cap. of a Hindoo principality, 19 m. NW. Bijnagur. It is beautifully situated in a valley, enclosed by wooded declivities, and partially encircled by a rivulet. The principal street is very spacious, and at one extremity is a fine pagoda to Krishna, the interior of which is elaborately ornamented with stucco bas-reliefs. Various other temples have been converted into dwelling houses or stables by the Mussulman pop.; and the vicinity abounds with fragments of Hindoo monuments.

KANOJE (*Kanyacubja*), a town of Hindostan, prov. Agra, possibly the an. *Calinipaxa* mentioned by Pliny, about 2 m. from the Ganges, 118 m. E. by S. Agra, and 67 m. WNW. Lucknow; lat. 27° 4′ N., long. 79° 47′ E. It is now a second-rate town of the district of Etaweh; but is mentioned by Ferishta as having been once the cap. of the principal kingdom along the Ganges, comprising the mod. provs. of Delhi, Agra, Oude, and Serinagur. The Indian histories are full of accounts of its grandeur and extent; and for a distance of 6 m. the traveller now wanders over a tract covered with scattered ruins of brick and other buildings. The most perfect vestige of the an. Hindoo city is a portion of a small and rude pagoda, its interior adorned with figures of Lakshmi and Rama, surrounded by the Hindoo pantheon in miniature. There are several handsome tombs, mosques, and other Mohammedan edifices in stone, Kanoje having been taken by the Mohammedans under Mahmoud of Ghizni, in 1018. Under the Moguls it gave its name to a circar; but it soon lost its importance, and, to complete its ruin, it was sacked by the Mahrattas in 1761. The mod. Kanoje consists of only a single street, and presents nothing worthy of note, except a citadel, close to which is the termination of a canal communicating with the Ganges.

KARA-HISSAR. See AFIUM KARA-HISSAR.

KARAK, or KHARRACK (the *Icarus* of Arrian), an island of the Persian Gulf, now belonging to Great Britain, lat. 29° 13′ N., long. 50° 21′ E., 35 m. NW. Bushire. It has an area of 12 or 13 sq. m., with a pop. of about 300 or 400. 'It affords a safe anchorage at all seasons, but more particularly during the severe gales which blow from the NW., and are the prevailing winds in this sea. The greater part of the island is so rocky, that little use can be made of it; but the E. side, being somewhat lower than the other parts, is capable of being cultivated. It has abundance of water. The inhab. gain a livelihood by gardening and fishing, and manufacture a small quantity of common cloth for their own consumption. The island of Corgo, lying about 1¼ m. or 2 m. N. Karak, contains about 2 sq. m., and is of a light sandy soil. It has also plenty of water, but not of so good a quality as that of Karak; and although not inhabited at present, it is capable of being cultivated, and will produce both wheat and barley during the rainy seasons.' (Kinneir's Pers. Empire, p. 18, 19.) Pearls of a superior colour and description are fished around the coasts of both islands. The Dutch, after having been obliged to abandon their factory at Bussorah, founded an establishment at Karak in 1748. They were, however, driven from it by the Arabs, about 1765. Karak was subsequently occupied by the Persians; and in 1807, for a short period, by the French. During the disagreement with the shah of Persia, the British resident, previously stationed at Bushire, removed thither; and the island was taken possession of by an English force in 1830. Karak is of some importance as offering a secure anchorage for ships, and a station where they may water and refit.

KARAMAN, a town of Asiatic Turkey in Karamania, 58 m. SSE. Konieh; lat. 37° 10′ N., long. 33° 5′ E. Pop. estim. at 14,000. The town stands at the S. extremity of a large plain, and at the foot of the lofty range of Bedlerin-dagh, a branch of Mount Taurus: it covers with its squares and gardens a large area; the houses are of mud and sun-dried bricks, and have a mean wretched appearance; but the climate is salubrious, and water abundant. The public buildings comprise four mosques, with the ruins of others, numerous khans and hummums, and a castle on a height, now mouldering to decay. Karaman trades with Kaisariah, Smyrna, and Tarsus, in cotton fabrics, hides, and nut-galls; and it has a pretty extensive manufacture of blue cotton cloth, worn by the lower classes.

Karaman, which occupies the site of the ancient *Laranda*, is said to have been founded by Karaman Oghe, a powerful prince living in the 14th century. It was the cap. of a Turkish kingdom, which lasted from the time of the partition of the Seljuck dominions of Iconium till 1486, when Karamania was subjected by the Ottoman emperor Bajazet II. Konieh then became the seat of the pachalic, and from that period Karaman has been gradually falling into decay.

KARAMANIA. See TURKEY IN ASIA.

KARASUBASAR, a town of European Russia, Crimea, 15 m. E. Simpheropol. Pop. 15,034 in 1858. The inhabitants are a mixture of races, chiefly Tartars, Greeks, Russians, Jews, and Armenians. Streets narrow, winding, and dirty. There are several graceful looking mosques, a new Rom. Catholic church, and a large building, or khan, occupied by shops. The town is celebrated for the manufacture of a very superior sort of red and yellow morocco leather, and contains several tanneries, candle and soap works, potteries and tile-works. It is also the great mart of the Crimea for fruit, wine, and cattle. There is a weekly market, and a great annual fair.

KARLSBURG. See CARLSBURG.

KARS, a town of Turkish Armenia, formerly cap. of a pachalic of the same name, on the Arpah-Chai, a tributary of the Aras, or Araxes, 85 m. NE. Erzeroum, and 160 m. E. by S. Trebisond. Pop. estimated at 12,300 in 1860. The town is situated on the N. side of a plain, which, though about 4,000 ft. high, is extremely fertile: a part of it is walled, and there is a citadel, which, however, is commanded by heights within musket-shot on the other side the river. Two stone bridges unite the two portions of the city divided by the river, which encircles the walled portion on three sides. The houses of the citadel are tolerably large and well-built, but those of the town below are of the underground architecture usual in the Armenian villages. The public buildings comprise several mosques, and one Armenian church outside the walls: the Armenian convent is uninhabited and in ruins. Kars being the centre of a fine corn-growing district, had formerly a considerable trade in farming produce; but it was nearly destroyed during the Russian invasion, and is only slowly recovering.

Kars, the origin of which is doubtful, was formerly a large town, with a pop. of nearly 8,000 families; but it is now little better than a heap of ruins. During the Russian occupation at the beginning of the century, a large part of the Turkish pop. abandoned it, while at the same time the Armenians emigrated with the retreating army of the Russians, leaving many deserted villages and much unoccupied land. Kars was

Digitized by Google

again besieged by the Russians in the war between Russia and Turkey 1854-55, and after a gallant defence by the Turks, under Colonel Williams, had to capitulate Dec. 12, 1855.

KASAN, one of the eastern governments of Russia in Europe, having N. Viatka, E. Orenburg, S. Simbirsk, and W. Nijegorod. Area, 24,000 sq. m. Pop. 1,543,344 in 1858. The inhabs. are partly Russians and partly Tchouvaches, of Finnish origin, and Tartars. The government is traversed for a considerable distance by the Wolga, the Kama, one of the principal affluents of the latter, and by some lesser streams, and is interspersed with numerous lakes. Surface generally flat, but in parts undulating and hilly; soil almost everywhere fertile, producing, with very imperfect culture, abundant crops of rye, wheat, hemp and flax. Forests very extensive, covering nearly half the surface. Climate in winter very severe; but the summer, though short, is generally fine. Grazing is not well understood, and but little attention is given to the rearing of cattle. The fishery in the Kama is very productive. There are numerous distilleries, saw-mills, and potash works, with tanneries. More than half the landed property within the government belongs to the crown, or to members of the Imperial family.

KASAN, a city of European Russia, cap. of the above government, on the Kasanka, about 4 m. above where it falls into the Wolga. Pop. 58,159 in 1858. After being burnt down by Pougatcheff in 1774, Kasan was rebuilt, by order of Catherine II., on a more regular plan. It was again the prey of an accidental conflagration in September 1815, by which it was more than half destroyed; but, like Moscow, it has risen from its ashes larger and better built than ever. It stands on very uneven ground, interspersed with lakes, and consists, like most other Russian cities, of three parts: the kremlin or citadel, on a considerable eminence; the town, properly so called; and the *slobodes*, or suburbs. The town is well built, and has broad and spacious squares and market-places. In the suburbs, which are principally occupied by the Tartar pop., the houses are of wood, and the streets filthy. Principal buildings, the grand cathedral, founded in 1552; the cathedrals of St. Peter and St. Paul, with several other cathedrals and churches, some of them built in the course of the present century. There are, further remarkable, the convent of Bogorodítskoi Kasanskoi, rebuilt by the emperor Alexander; the hotel of the general governor; the archiepiscopal palace; the hotel of the nobles; the bazaar; the military hospital, and the arsenal. Kasan is one of the most literary towns in Russia. It has a university, founded in 1804, but which was not opened till 1814, with 70 principal and subordinate professors, about 300 pupils, and a library of above 28,500 volumes. Its principal object is to supply instruction in the eastern languages, or in Arabic, Persian, Turkish, Tartar, Mogul, and Chinese language and literature. The city has also a theological academy, with a gymnasium, an observatory, a grammar-school, a Tartar school, and a school for the instruction of schoolmasters. A great cloth manufactory, established by Peter the Great, is now the property of private individuals, and employs about 1,000 work-people; and there are besides manufactories of cottons, hardware, earthenware, and tiles, with tanneries, soap-works, and distilleries. Kasan is the seat of an admiralty, and vessels are constructed for the navigation of the Wolga and the Caspian. It also carries on an extensive trade, for which its situation adjoining the Wolga gives it peculiar facilities. About 15,000 of the pop. are Mohammedans. The rest, with the exception of a few Protestants, belong to the established Greek church.

KASCHAU, a royal free city of Hungary, in the circ. on this side the Theiss, co. Abaujvar, on the Hernad, 123 m. NE. Pesth, with which city it is connected by railway. Pop. 17,150 in 1858. The town is well built, with fine squares, and regularly laid out streets; and has 13 Rom. Cath. and 2 Lutheran churches, besides a theatre, and several other handsome public buildings. The chief public establishments are a royal academy, with a library of 10,000 vols., and a fine collection of natural history, a gymnasium, an episcopal seminary, a school for nobles (*ad leges Konvikt*), and a military asylum: it is the seat of a county-assembly and court of justice, and has manufactures of tobacco, cutlery, earthenware, and paper, and a large transit trade with Poland.

KATRINE (LOCH), a lake of Scotland, in the district of Monteith, in the SW. part of Perthshire, on the confines of Stirlingshire, 8 m. W. Callander, and 5 m. E. from Loch Lomond. This, which is the most westerly and largest of a chain of lochs, consisting of lochs Venacher, Achray, and Katrine, the principal feeders of the Teith, is about 10½ m. in length, and from 1½ to 2 m. in width, of a serpentine form, and very deep. It is embosomed among lofty mountains, divided by deep ravines, whose sides, in parts clothed with wood down to the water's edge, and in parts consisting of bold rugged precipices, give it every variety of wild, picturesque scenery. Still, however, it was but seldom visited, and little known, till Scott made it the scene of his fine poem of *The Lady of the Lake*, when it at once attained the maximum of celebrity, and has since been annually resorted to by crowds of visitors. At the E. end of the loch, between it and Loch Achray, is the celebrated pass of the Trosachs, so beautifully described in stanzas 11–13, of the first canto of *The Lady of the Lake*.

KAZAMEEN, a town of Asiatic Turkey, prov. Irak-Arabi, on the W. bank of the Tigris, 3 m. N. Bagdad. Pop. estim. at 7,000, chiefly Persians, who have been induced to settle here on account of its being the burying-place of two celebrated imâms, to whose memory a noble mosque has been erected. It is ornamented with two gilded cupolas, and, like those of Meshed Ali and Kerbela, is supported by the contributions of pilgrims. The town has a bazaar, many coffee-houses, 3 *hummums*, and a caravanserai; and on the opposite side of the river is the tomb of Imâm Abn Hanafi, a Mohammedan saint.

KEDGEREE, a town of British India, prov. Bengal, on the W. side of the Hooghly river, near its mouth, lat. 21° 55′ N., long. 88° 16′ E. It stands in a low, swampy situation; but is, notwithstanding, much healthier than Diamond Harbour. A lighthouse has been erected a few miles further down the river. There is also a government marine officer stationed at this town, who has to make daily reports of the ships which arrive and sail.

KEDJE, a town of Beloochistan, prov. Mukran, of which it is the cap., on a rivulet, by which the surrounding district is well irrigated, 274 m. SW. Khelat; lat. 26° 24′ N., long. 62° 28′ E. Pop. estim. at 3,000. The town stands clustered around the base of a precipice, on which is a fortress; and was formerly a place of considerable trade, which having declined, it has fallen into decay.

KEHL, a town of Baden, circ. Middle Rhine, on the Rhine, immediately opposite Strasbourg, and 10 m. NW. Offenburg, on the railway from Strasbourg into Baden. Pop. 1,623 in 1861. Kehl was formerly a fortress, and was esteemed an im-

Digitized by Google

portant bulwark of Germany. It was fortified by Vauban in 1688, ceded by France to Baden in 1697, taken by the French in 1703, 1733, 1793, and 1796; by the Austrians, also, in the latter year; and re-taken by the French in the year succeeding. After the peace, its works were dismantled, Germersheim being fortified by the Germ. Confed. in its stead. The town is connected by a fine bridge with the opposite bank of the Rhine, and Strasbourg. Its inhab. employ themselves chiefly in transit trade.

KEIGHLEY, or KIGHLEY, a market town and par. of England, in the W. riding of co. York, wap. Staincliff and Ewcross, on an affluent of the Aire, 16 m. WNW. Leeds; 178 m. NNW. London by road, and 218½ m. by Great Northern railway. Pop. of town, 15,005, and of par. 18,819 in 1861. The town is beautifully situated in a valley close to the range called the Blackstone Edge; and, though irregularly built, comprises many handsome stone houses: it is well paved, sufficiently supplied with water, and lighted with gas. A neat and commodious court-house and a spacious market-place were erected in 1833, and more recently a mechanics' institute has been built on ground given by the Earl of Burlington, who has large possessions in and near the town. The parish church was built in 1805, on the site of one erected in the reign of Henry I., and is a large and handsome structure, with a lofty steeple, containing a fine peal of bells: the living is a rectory in the gift of the Duke of Devonshire. There are also places of worship for Independents, Baptists, Wesleyan New Connection, and Primitive Methodists, Swedenborgians, and the Society of Friends; and to all of these, as well as to the churches, large Sunday-schools are attached, furnishing religious instruction to about 1,800 children of both sexes: A free grammar-school, founded and well endowed in 1713, a girls' national school, and an infant school, are the chief educational establishments; and a mechanics' institute, founded in 1825, and now in union with that at Leeds, has conferred many benefits on the working classes. The worsted manufacture, especially of coarse stuffs, merinos, and worsted yarns, is carried on to a considerable extent; and the produce is chiefly sold in the piece-halls of Halifax and Bradford. The Leeds and Liverpool canal, which passes near the town, affords cheap conveyance for manufactures, and establishes a communication with Hull on the one hand, and Liverpool on the other. Under the Boundary Act Keighley is a polling place for the W. riding. It is also the head of a union, comprising 6 pars. Markets, well supplied, on Wednesday: fairs, May 8 and 9, and Nov. 7, 8, and 9.

Keighley is known in the history of the great civil war, as having been the scene of an encounter, in 1645, between the king's troops and a division of the parliamentary army, under Col. Lambert. Its name is derived from an old family called Keighley, one of whose members married a Lord Cavendish, from whom the present Duke of Devonshire and the Earl of Burlington are descended.

KELLS, a town of Ireland, prov. Leinster, co. Meath, adjacent to the Blackwater, on the top and sides of a gentle hill, 35 m. NW. Dublin, and 21 W. Drogheda, on a branch line of the Midland Great Western railway. Pop. 3,224 in 1861, against 4,205 in 1841. The town consists of three principal and some smaller streets, and has some good houses; but, generally speaking, is a poor, mean place. Here is a fine old church, contiguous to which is a pillar or round tower 99 ft. in height. It has, also, a R. Cath. chapel, a court-house, market-house, bridewell, fever hospital, and a national school.

Kells is a very old town, a synod having been held here in 1152, and a castle erected on the site of the market-place in 1178. Here, also, was a monastery, some remains of which still exist, and are called St. Columb Kill's House, from the name of its reputed founder. In one of the streets is a fine stone cross. The bor. returned two mems. to the Irish H. of C., but was disfranchised at the Union. The magnificent seat of the Headfort family is in its vicinity.

KEITH, a market-town of Scotland, co. Banff, on both sides the Isla, a tributary of the Deveron, 41½ m. NW. Aberdeen, on the Great North of Scotland railway. Pop. 2,648 in 1861. Keith is divided into three towns, namely Old Keith and New Keith, on the S. of the river, and Fife Keith, on the N., the whole lying in the centre of an amphitheatre of hills. The first, which is very old, is but of mean appearance and irregular shape; the second, begun to be erected in 1750, stands on a gentle eminence to the SE. of the former, and consists of one principal street divided into several portions; the third, or Fife Keith, which had its origin in 1816, is connected with the two former towns by two bridges over the Isla. New Keith is the largest and best built of the three divisions in question, and in it most part of the public buildings are situated, such as the par. church, a Gothic building, with a tower 104 ft. high, and a R. Cath. chapel, after the plan of St. Maria de Vittoria at Rome. It has also an episcopal chapel, and two meeting-houses belonging to the Associate Synod. The means of education are very ample. There are four subscription libraries. A considerable number of persons are employed in weaving woollen and linen cloth for the Aberdeen manufacturers. In addition to weekly markets, Keith has four annual fairs, all of considerable importance. Summer-eve fair, held in September, is the greatest fair in the north for cattle and horses.

A skirmish took place in 1745 at Old Keith, between the forces of the Pretender and those in the royal service, in which the former had the advantage, and carried off 150 prisoners. James Ferguson, the celebrated self-taught astronomer, was born in the vicinity of Keith: the only school he ever attended was one at Keith, and that for only three months. He died in 1776. His 'Autobiography' is well known.

KELSO, an inland market-town of Scotland, co. Roxburgh, beautifully situated on the left bank of the Tweed, near the point where it is joined by the Teviot, 38 m. SE. Edinburgh, 20½ m. SW. Berwick-upon-Tweed, and 366 m. N. London, by Great Northern railway. Pop. 4,309 in 1861. The town, which is neat and handsome, consists of four principal and some smaller streets. The former meet in a square or market-place in the centre of the town, consisting of well-built houses, mostly of freestone and slated. On the E. side of this square is the town-house, an edifice of two stories, with a pediment in front supported by four Ionic columns, surmounted by a handsome balustrade and dome springing from the centre of the roof. The old par. church being a 'misshapen pile,' a new or second par. church was built here in 1837 in the Elizabethan style, with a quadrangular tower 70 ft. high. The bridge across the Tweed, from a plan of Rennie, is said to have been the prototype of Waterloo Bridge over the Thames by the same architect. It has five elliptical arches; its total length is 494 ft.; the breadth of the roadway is 25 ft., and the greatest height from the bed of the river 42 ft. It was finished in 1803 at an

Digitized by Google

expense of 18,000*l*. In the immediate vicinity of the town, on the W., is Fleurs, the seat of the ducal family of Roxburgh, the feudal superiors of the bor. A mansion erected in 1718, and recently repaired and modernised, combining, as Sir W. Scott observed, 'the ideas of ancient baronial grandeur with those of modern taste.' But the most prominent object in or round Kelso is its venerable abbey, founded in 1128 by David I. for Tyronensian monks, and endowed with immense possessions and privileges. Its form is that of a Latin cross, and it affords a fine specimen of the Saxon or early Norman style of architecture. It has long been in a state of dilapidation; but the Scotch reformers are guiltless of the demolition of this noble fabric, for, having been occupied as a place of security by the townspeople in 1545, it was then battered down by the English under the Earl of Hertford. The parts now remaining are the N. and S. aisles, each having two round towers, with two sides of the central tower, now only 91 ft. high. The thickness of the lower walls is 5½ ft. The pillars are clustered; the arches circular. Part of the ruin served as the par. church from 1649 till 1771, when it was deserted, from the idea of insecurity, for another place of worship. The Roxburgh family have of late laudably exerted themselves to repair and perpetuate this fine ruin. Kelso has been characterised by Scott, in his 'Autobiography,' as 'the most beautiful, if not the most romantic, village in Scotland.' 'It presents objects,' he says, 'not only grand in themselves, but venerable from their associations.' The best view of the town and environs is from the bridge.

In addition to the old and new par. churches already noticed, there are a number of other places of worship in the town, belonging to the Episcopalians, Cameronians, Original Seceders, Relief and Associate Synod. There are ten schools in the bor. and par., attended by about 700 scholars; so that about a seventh part of the people are, at the same time, being educated; and this without including Sunday schools. Kelso has six subscription libraries; the oldest, containing about 5,000 vols., having been instituted in 1750. There is also a 'Kelso Physical and Antiquarian Society.' Kelso was the first provincial town in Scotland that introduced the printing-press. (Irving's Scot. Poets, i. 75.) The first edition of Scott's 'Minstrelsy of the Scottish Border' was printed in Kelso by James Ballantyne, who afterwards brought the typographical art to high perfection in Edinburgh, where he carried on the printing business in partnership with Scott.

Kelso was originally a kind of suburb to the bor. of Roxburgh, on the opposite bank of the Tweed. But the foundation of the abbey gave Kelso a more important character; and, on the final destruction of Roxburgh, in the fifteenth century, its inhabs. transferred themselves thither. No traces now remain of the bor. of Roxburgh, and but few of its castle; though the latter was for centuries one of the most important Border fortresses. In 1460, James II., having taken the town of Roxburgh and demolished it, laid siege to the castle, during which he was killed by the bursting of a cannon. The queen, attended by her infant son, James III., encouraged the besiegers, and, in a few days, the fortress was compelled to surrender. It was then destroyed; since which time it has remained in ruins, though partially repaired by the English, under Somerset, in 1547. Soon after the Reformation, the lands and possessions of the abbey were conferred on the ancient family of Kerr, of Cessford, in the hands of whose descendants, the family of Roxburgh, they still remain. Kelso has repeatedly suffered from conflagrations, not in warlike times merely, but in pacific, as in 1686 and 1738.

KEMPTEN (an. *Campodunum*), a town of Bavaria, circ. Swabia and Neuberg, cap. distr. of same name, on the Iller, 50 m. SSW. Augsburg, on the railway from Augsburg to the lake of Constance. Pop. 10,370 in 1861. Kempten consists of two parts, an old town surrounded with walls nearly encircled by the new town. The former is the commercial portion of Kempton: the latter, seated on higher ground, comprises the abbey, where was formerly held the court of the abbot of Kempten, an ecclesiastic possessing, besides the town, an independent territory of 340 sq. m., ceded to Bavaria in 1802. Kempten has a fine collegiate church, aqueduct, and theatre, a hospital, foundling asylum, and public library; and is the seat of the council for the circle, courts of law for the circle and town, a board of tolls, a gymnasium, and high-school. It has manufactures of linen and cotton fabrics, and a brisk trade in these goods, and in wool, cattle, and Italian produce. The Iller becomes navigable near Kempten. Adjacent to the town is the eminence of Hilarmont, on which are the ruins of a fortress supposed to be Roman, and where various Roman coins have been found.

KENDAL (KIRBY), a market town, parl. bor. and par. of England, co. Westmoreland, ward of same name, 40 m. S. Carlisle, 219 m. NNW. London by road, and 252½ m. by London and North Western railway. Pop. of bor. 12,029, and of par. 18,600 in 1861. The town on the side of a hill, at the bottom of which the river Kent (crossed here by three bridges), runs nearly N. and S., consists principally of one long street on the line of the Carlisle road, and a lateral street leading down to the river on the Appleby road. The houses are well built of stone, and being whitened, and roofed with blue slate, have a remarkably clean and neat appearance. The townhall is an elegant building, and the market, for butchers' meat, is neat and commodious. At the NW. end of the town is a large and well arranged workhouse, and near it is a house of correction. The other principal buildings are a handsome hall, belonging to the society of 'odd fellows,' the assembly and news rooms, theatre, and several extensive factories. The parish church, near the S. entrance of the town, is a large Gothic structure, with a square tower: the living is a vicarage in the gift of Trinity College, Cambridge. There are two other churches, and 11 chapels belonging to different denominations of dissenters. Among the educational establishments are a well endowed grammar-school with university exhibitions, a blue-coat charity, a green-coat school, a large national school, supported both by endowment and subscription, a school of industry, an infant school, and several Sunday schools: there is also a thriving mechanics' institute. The charitable institutions comprise a hospital for old unmarried women, endowed with 100*l*. a year, a dispensary, and a lying-in charity; and the corporation has the trust of charitable funds to a considerable amount.

Kendal has long been noted for its weaving industry; and, in the reigns of Richard II. and Henry IV., special laws were enacted for the protection of its manufactures. The present manufactures comprise linseys, serges, baizes, the coarser kinds of kerseymere, and carpets. There are about 3,000 persons employed in weaving, and otherwise preparing cloth. The marble works, for cutting and polishing marble, quarried at Kendal Fell, employ also a number of hands; and the

Digitized by Google

machinery is very ingenious. There is water-communication by a canal with Lancaster.

Kendal was first incorporated by Queen Elizabeth, and a second charter was granted by Charles I. Under the Municipal Reform Act, it is divided into three wards, the municipal officers being a recorder, a mayor, and 5 other aldermen, with 18 councillors. Corporation revenue, 1,110*l.* in 1862. The Reform Act conferred on Kendal the privilege of sending 1 mem. to the H. of C.: the electoral boundaries include the townships of Kendal and Kirkland, with those parts of Nethergraveship which adjoin Kendal. Registered electors 405 in 1865. Markets, well attended, on Saturday: cattle fairs, March 22, April 29, and November 8.

Near Kendal, on the opposite side of the river, are the ruins of a castle, commandingly situated on a rocky eminence, and celebrated as the birthplace of Catherine Parr, one of the queens of Henry VIII. A large portion of the outer wall, and two towers, still remain to mark its former extent.

KENILWORTH, a market town and par. of England, co. Warwick, hundred Knightlow, 5 m. N. Warwick, 18 m. SE. Birmingham, and 96 m. NNW. London, by London and North Western railway. Pop. 3,013 in 1861. The town is delightfully situated on an affluent of the Avon, and consists chiefly of one long street, about 1 m. in length, part of the road from Warwick to Coventry. In the lower part of the town is the church, a Gothic building of different periods, having a handsome tower and spire; and near it are the ruins of an abbey, valued at the dissolution of the monasteries at 644*l.* On the higher ground are several handsome houses; and at the top of the hill on which the town stands are the ruins of a castle, the ancient fame of which has been made familiar by Sir Walter Scott. There are several places of worship for dissenters, to each of which, as well as to the church, are attached well attended Sunday schools. A free-school was founded in 1724, and there is a large national school. Among other charities, are almshouses for 16 widows, and an apprentice fund. Ribands, gauzes, and combs are made here; and there are chemical works for the preparation of Glauber salts, sal-ammoniac, and Prussian blue; but they are not important. Markets on Wednesday; horse and cattle fairs, April 30 and Sept. 30.

Kenilworth Castle, whose extensive ruins bear ample testimony to its ancient splendour and magnificence, was erected in 1120 by Geoffry de Clinton, treasurer and chamberlain to Henry I., and in the reign of Edward I. the earl of Leicester held a tournament here, which was attended by 100 knights with their ladies. The estate afterwards reverted to the crown, and was given by Queen Elizabeth to her favourite, Dudley, earl of Leicester, who is said to have expended on its improvement 60,000*l.*—a vast sum for those days. 'The outer wall,' says Sir W. Scott, 'inclosed seven acres, a part of which was occupied by extensive stables and by a pleasure-garden, with its trim arbours and parterres; and the rest formed the large base-court or outer yard of the noble castle, which was itself composed of a huge pile of castellated buildings surrounding an inner court. A large and massive keep, called Cæsar's Tower, was of uncertain though great antiquity; and that noble and massive pile, which yet bears the name of Lancaster's Buildings, was erected by John of Gaunt, 'time-honoured Lancaster.' The external wall was on the S. and W. sides adorned and defended by a lake partly artificial, across which was a stately bridge, and on the N. side was a barbican, which, even in its present ruinous state, is equal in extent and superior in architecture to the baronial castle of many a northern chief. Beyond the lake lay an extensive chase, full of deer and game, and abounding with lofty trees. Queen Elizabeth twice visited this noble palace; and here, in 1575, she was entertained, with her whole court, with princely magnificence during 17 days, at the enormous expense of 1,000*l. per diem*. The castle was plundered and ultimately left in a state of ruin by Cromwell's soldiers, who appropriated to themselves the adjacent lands. After various changes, the estate came into the possession of Hyde, earl of Clarendon, and is still held by that noble family.' (Sir W. Scott's 'Kenilworth,' vol ii. with notes.)

KENNERY (CAVE-TEMPLES OF). See SALSETTE.

KENSINGTON, a town and par. of England, co. Middlesex, hund. Ossulston, forming one of the western suburbs of London, 1½ m. W. Hyde Park Corner, comprising (with the hamlets of Bayswater, Earl's Court, Brompton, and Little Chelsea) an area of 2,680 acres. Pop. of par. 70,108, and of town 51,910, in 1861. The town consists of a main street forming a part of the London road, and of many streets running from it N. and S. The houses are well built, and many large detached residences are scattered in the outskirts. The par. church is a plain but spacious building, erected in 1690; and the living is a vicarage in the gift of the Bishop of London. There are also many district churches, and a great number of places of worship for dissenters. A large charity school, national and Lancastrian schools, and private boarding schools, furnish instruction to all classes: and there are numerous charities for the relief of the aged and sick poor. The trade of the town chiefly depends on the many families of rank and wealth resident in and around it.

Kensington Palace, which, with its gardens, forms the chief object of attraction, is an irregular brick building, purchased by William III. of the Earl of Nottingham. Among other additions made by that monarch, the whole S. front was rebuilt under the direction of Sir C. Wren, and the interior received great improvements and embellishments: the W. front was rebuilt by Kent, in the reign of George II. The state rooms comprise 12 handsome chambers, well adapted for occasions of ceremony; but few of them, except the galleries, are of commanding proportions. The staircase, painted by Kent, is intended to represent a number of spectators on a court day; and the artist has introduced several portraits of characters connected with the court of George I.: the style, however, is *bizarre*, and in very bad taste. The presence chamber is now hung with pictures, many of which were highly valued by the late president West. This palace was the residence of William and Mary, Anne, George I., and George II., all of whom (except George I.) died within its walls. George III. removed the town residence of the court to St. James's; and Kensington Palace has since been allotted to junior members of the royal family. The childhood of Queen Victoria was spent in it; and it was for many years the town residence of the Duke of Sussex. The duke's library, which has been sold, was very valuable, especially the collection of bibles and biblical works, inc. about 300 rare MSS. The gardens occupy an area of about 350 acres, and have been for many years an attractive public promenade. Holland House, a brick structure, in the Elizabethan style, at the W. end of Kensington, was built in 1607, and descended in the reign of Charles I. to the Earl of Holland. Addison

Digitized by Google

occupied it after his marriage with the Dowager Countess of Warwick. In 1766 it was purchased by Henry Fox, lord Holland, in whose family it still remains. The library is 112 ft. in length, and contains a valuable collection of books, especially in Spanish and Portuguese literature. There are many good pictures, and in the hall is a sitting statue of C. J. Fox. About 200 acres of land are attached to the house, which is one of the finest residences in the vicinity of London. (For a full anecdotal history of Kensington and its neighbourhood, see Leigh Hunt's book, 'The Old Court Suburb,' 2 vols. London, 1855.)

KENT, a marit. co. in the SE. part of England, being the nearest of any in the kingdom to the Continent, having N. the Thames and its æstuary, E. and SE. the German Ocean and the Straits of Dover, S. Sussex, and W. Surrey. Its greatest length, from Deptford to the N. Foreland, is about 64, and its greatest breadth about 30 m. Area 1,627 sq. m., or 1,039,419 acres, of which above 900,000 are arable, meadow, and pasture. This is a finely diversified and beautiful co. Two parallel ridges of hills traverse its whole extent from E. to W. The upper, or most northerly of these ranges, extending from Westerham, on the confines of Surrey, to Dover, being composed chiefly of chalk, and thence called the chalk ridge; while the lower, or most southerly range, about 8 m. from the former, is usually called the ragstone range, from its consisting principally of ragstone and ironstone. The country to the N. of the upper range, including the isles of Sheppey, Grain, and Thanet (see THANET), is generally very fertile, and contains a good deal of marshy and of rich loamy land, producing the finest wheat. Romney Marsh, a celebrated grazing district (see ROMNEY MARSH), and the *Weald*, lie to the S. of the lower or ragstone range. The latter, which extends into Sussex and Surrey, is a very singular tract. Its soil is generally stiff and clayey, but in parts sand predominates. For a lengthened period it formed an immense forest; but was gradually, though slowly, brought into tillage. Its soil continues to be particularly well adapted to the growth of timber, especially oak, which here attains to the greatest luxuriance. Most inclosures in the weald are surrounded with oaks, and every wood and coppice is full of them. 'When viewed from the adjoining hills, which command a prospect over the whole of it, the Weald exhibits the most delightful scene that can be imagined. It appears to the eye an extensive level country (the few hills in it being so small and inferior to those whence it is viewed), covered with all the richness of both art and nature; the variety of small inclosures of corn and meadow, and the houses, seats, and villages, promiscuously interspersed among the large and towering oaks, which grow over the whole face of it, have the most pleasing effect, and represent to us, even at this time, something, though a great improvement of its original state, in the idea of an inhabited and well cultivated forest.' (Hasted's Kent, i. 293,298, 8vo. ed.) From its proximity to the Continent the climate of Kent is colder in winter, and the E. winds in spring are said to be more piercing than in other cos. in the same parallel more to the W.; but, on the other hand, the summers are warmer, and its autumns less liable to wet, which renders it especially fitted for the production of corn and fruit. Agriculture is in a very advanced state in Kent, and it has a greater variety of products than any other co. in the kingdom. Its wheat, barley, beans, and peas are all excellent. With the exception of the Isle of Thanet, turnips are extensively raised on the light soils. Hops are produced in large quantities, especially in the district between Maidstone and Canterbury. Most part of the cherries, filberts, plums, and other fruits brought to the London markets, are supplied by the orchards between Maidstone and Tonbridge, while the Isle of Thanet and other places furnish supplies of spinach and of various seeds. Though Kent feeds large numbers of cattle, it cannot be called a grazing co.: the stock of sheep is, however, very large. Romney Marsh has a peculiar breed that furnishes long, combing wool. There is a great deal of timber in other parts of the co., exclusive of the weald. Property much divided, and there are no great estates. Size of farms various; but, owing to the sort of garden culture carried on in many parts, they are mostly rather small; many varying in extent from 10 to 30 acres, while there are but few above 200 or 250 acres.

The yeomanry of Kent are a very superior class; and, besides their own, some of them occupy extensive hired farms. All lands in Kent, unless specially exempted by an act of the legislature, are held by the tenure of *gavelkind*; descending, in the event of the father dying intestate, not to the eldest son, but to all the sons alike in equal portions; and if there be no sons, they divide equally among the daughters. This is supposed to have been the common tenure in England before the Conquest; but, exclusive of Kent, it now obtains in but a few places. Some estates have been *disgavelled*, or excepted by a special act of parliament, from this tenure; and partition is now, in most instances, prevented by testament. But such lands as are not disgavelled, or settled by testament are invariably disposed of in the way stated above. (Hasted's Kent, i. 311-321, 8vo. ed.) Ironstone is abundant in many parts; and, previously to the employment of coal in the making of iron, the weald, from the abundance of its timber, was a principal seat of the iron trade; but this has been long abandoned. With the exception of ship-building carried on at Deptford, Woolwich, Chatham, and other places, and the industry of the metropolitan part of Kent, manufactures are unimportant; they consist of paper, made at Maidstone and Dover, gunpowder at Dartford and Faversham; and toys at Tonbridge. Exclusive of the Thames, the principal rivers are the Medway (which see), Stour, Rothe, Darent, and Ravensbourne. Kent is divided into the two nearly equal divisions of E. and W. Kent, each having its own court of sessions. Principal towns, Greenwich, Deptford, Chatham, Rochester, Canterbury, and Dover. It is divided into 5 lathes, 63 hundreds, and 15 liberties, and 411 parishes. It sends 18 mems. to the H. of C., viz. 2 for each of the 2 divisions of the co.; 2 for each of the bors. of Canterbury, Rochester, Dover, Greenwich, Maidstone, and Sandwich, and 1 each for Chatham and Rye. Registered electors for the co. 18,061 in 1865, being 8,250 for the eastern division, and 9,811 for the western division. Pop. 738,699 in 1861, of which 193,427 metropolitan, and 545,272 extra-metropolitan. Amount assessed to property-tax, 2,555,438*l.* in 1862.

KENTUCKY, one of the U. S. of America, in the central part of the Union, between lat. 36° 30′ and 38° 30′ N., and long. 86° and 89° W.; having N. the states of Ohio, Indiana, and Illinois, from all which it is separated by the Ohio river, W. Missouri, from which the Mississippi divides it, S. Tennessee, and E. Virginia. Length, E. to W., nearly 400 m.; breadth, varying from 40 to 175 m. Area, 37,680 sq. m. Pop. 1,555,684 in 1860, of whom 225,483 were slaves. The general slope is

Digitized by Google

towards the NW. The E. extremity of the state is occupied by some offsets of the Alleghany mountains; and along the Ohio the country is broken, and contains many abrupt hills, and deep and fertile valleys, often densely wooded. Towards the centre of Kentucky the surface is undulating; the W. is comparatively level. In the latter direction is an extensive tract called the 'barrens,' not sterile, however, as its name would seem to imply, but comprising some of the fine pasture land for which Kentucky is distinguished, and studded with oak and other forest trees. Next to the Ohio and Mississippi, the chief rivers are the Cumberland, Green, Kentucky, Licking, and Tennessee, which have numerous affluents, and are all tributary to the Ohio. Most of them rise in the SE. and mountainous part of the state. Cumberland river, the course of which is principally in Kentucky, has an entire length of 440 m., and is navigable for steam-vessels to Nashville in Tennessee, and for boats to near its source. Most of the other rivers above mentioned are navigable for more than 100 m. in the winter; but in summer the large streams are diminished to a greater extent than those of any other state in the union, and the small ones are entirely dried up. The whole of Kentucky appears to rest upon a bed of limestone, which rock is usually met with about 8 ft. below the surface. Bituminous coal is found along the banks of some of the rivers, and iron of excellent quality in numerous places. There are many salt springs, from which salt is obtained in sufficient quantities, not only for the supply of Kentucky itself, but of a great part of Ohio and Tennessee. Nitre and fine white marble are plentiful. In the limestone formation, in the SW., are several stupendous caverns, one of which, Mammoth Cave, in Warren co., is supposed to be 8 or 10 m. in extent. The climate in the E. and central parts is highly salubrious; but in the W., especially along the Mississippi, it is unhealthy, no year elapsing without a considerable mortality from fevers. Great extremes of heat and cold are experienced in the state; and, considering its lat., its winters are both long and severe. The soil is generally fertile: of 83 cos., into which Kentucky is divided, 50 consist of rich land, and are comprised in the tract called the 'Garden of Kentucky,' 150 m. in length, and from 50 to 100 m. in breadth, in the centre of the state. Nearly all the European grains, Indian corn, and tobacco are cultivated. The hills along the N. boundary are under culture wherever their declivities are not too steep for the plough; and in those places they are generally covered with forest trees of vigorous growth, as oak, pine, elm, sycamore, chestnut, black walnut, and locust trees. The vine, mulberry, and a great variety of other fruits are grown. Hemp is a staple product. In the central tracts the land is generally well cultivated, and the farmhouses and offices are good. Artificial grasses and red clover are sown; white clover is of spontaneous growth. The chief branch of rural industry is the rearing of horses and cattle. The Kentucky horses are of acknowledged excellence, and bred in large numbers. Their superiority is so great that many are sent over the mountains to the Atlantic states, and the principal supply of saddle and carriage horses for the lower country is drawn from Kentucky, the horses being sent down the Mississippi in flat-bottomed boats. Mules are numerous, and of excellent quality; when full grown they average from 15 to 16 hands, and are sometimes 17 hands, high: their price varies from 80 to 160 dollars. Many of the central counties are cultivated by large proprietors, who rear cattle very extensively, with which they supply the W. markets. Large droves of the first quality are also exported to Virginia and Pennsylvania. Hogs are reared in large numbers on the barrens. Manufactures are of secondary importance: the chief are those of cotton and woollen cloths, cordage, salt, iron goods, and maple sugar. Cattle, hemp, wheat, and tobacco are the principal articles of export. Most of the external trade is carried on through New Orleans. The means of internal communication are very complete, including a well-planned network of railways. Improvements in the river navigation are at the charge of the state; the construction of locks and dams on Green River was begun by the government in 1834. A canal near Louisville, 2 m. long, by which the rapids are avoided, was completed in 1831. Frankfort, on the Kentucky, is the cap., and seat of the legislative government; but Louisville is the largest commercial emporium. Lexington is the other principal town.

The legislative power is vested in a senate, which consisted, in 1864, of 38 mems., and in a house of representatives of 100 mems. The senators are elected for four years, one-fourth of their whole number being returned yearly. The representatives are elected annually. The right of election is in every free male citizen, 21 years of age, who has resided in the state for two years preceding the election, or for one year in the county for which he desires to vote. The governor and lieutenant-governor hold office for four years; and are re-eligible only after the lapse of seven years. Justice is administered in a supreme court, a court of chancery, and 16 district courts. The U. S. circuit-court is held at Frankfort. There are many superior schools in the chief towns. Transylvania University, the oldest establishment of the kind in the W. part of the union, is at Lexington (which see). Centre college, at Danville, founded in 1822, has an average attendance of 130 students. St. Joseph's college, at Bardstown, founded 1819, has a library of 7,000 vols., and generally about 130 students. There are colleges at Augusta, on the Ohio, Princeton, and Georgetown; a state literary fund, several lunatic and deaf-and-dumb asylums, and hospitals.

The earliest permanent settlement of this territory was made by settlers from N. Carolina, in 1773. Kentucky continued to form a part of Virginia till 1790, when a separation was effected; and in 1792 it was admitted into the union as an independent state. It sends nine mems. to Congress.

KERBELA, or MESHED HOSSEIN, a town of Asiatic Turkey, prov. Irak-Arabi, 50 m. SW. Bagdad. Pop. estimated at 20,000. The town stands on a plain, about 6 m. W. of the Euphrates, with which it is connected by a canal said to be more ancient even than the era of Alexander. It has five gates, a well-supplied bazaar, and seven caravanserais; but the chief ornaments of the city are the tomb of Hossein, adorned with a gilded cupola and a noble mosque. Its chief lustre has been derived from Hossein, son of Ali by Fatima, the daughter of the Prophet, who was slain near it, and to whose tomb numerous pilgrims of the sect of Ali flock from all quarters, but especially from Persia, to pay their devotions. It is subject to the Turks, but still the majority of the inhab. are Persians; and it has always been a favourite object of their king to obtain possession of this place, as well as of Meshed Ali and Kazameen, both of which are, like Kerbela, the resort of pilgrims. The environs of the town and borders of the canal are shaded by extensive plantations of palm-trees, and the walls, which are upwards of 2 m. in circuit, are kept in good repair, to secure

Digitized by Google

the riches of the holy city against the predatory excursions of the Wahabees, by whom it was plundered some years ago.

Kerbela occupies the site of *Vologesia*, a small town built by Vologese, one of the Parthian kings, contemporary with Nero and Vespasian.

KERESOUN (an. *Cerasus*), a town and sea-port of Asiatic Turkey, on the S. shore of the Black Sea, pach. Trebizond, from the town of which name it is distant 88 m. W. by S.; lat. 40° 57′ 10″ N., and long. 38° 24′ E. Pop. about 3,000, half being Armenian and Greek. It stands on an elevated rocky promontory bounding an extensive bay to the E., and appears to have been formerly a place of great strength. A considerable part of the ancient wall still exists; but the present town is in a ruinous condition, and the people bear the appearance of being in abject poverty. There is some little trade in corn with the Crimea; and trading vessels are built in the bay under the city walls.

Cerasus was visited by Xenophon on his return with the ten thousand; and he calls it a 'Hellenic colony, situated in the country of the Colchi.' (Anab. v. 3.) It is also said to be the native country of the cherry, which hence received its name. It was here that Mithridates ordered his wives and sisters to be poisoned after the battle of Cabira, when it fell into the hands of Lucullus; but that it was, as Arrian states, identical with the Pharnacia which was the residence of the kings of Pontus is, to say the least, extremely doubtful. (Cramer's Asia Minor, i. 281.) Keresoun was conquered by Mahmoud II., and has since been attached to the Turkish empire.

KERKOUK (*Demetrias*, Strab.; *Corcura*, Ptol.), a large town of Asiatic Turkey, in Lower Kurdistan, cap. sandjiak, 100 m. SE. Mosul, and 130 m. N. Bagdad. Pop. estim. at 13,000. The town is situated on a commanding eminence nearly perpendicular on all sides, below which is an extensive suburb: it is surrounded by a mud wall, but beyond this are extensive suburbs. Besides numerous mosques, it has three R. Catholic churches and one Armenian ditto. The surrounding district is uneven and hilly; and on the N. side a low range of barren and rocky mountains separates it from the fine plain of Altun-Kupri. In the pass through these mountains are numerous naphtha pits, yielding an inexhaustible supply of that useful commodity, which is sent in earthen jars all over the neighbouring country.

KERMAN (an. *Caramania*), a prov. of Persia, between lat. 25° 30′ and 31° 20′ N., and long. 54° 30′ and 60° 20′ E., having N. Khorassan, E. Affghanistan and Beloochistan, S. the Persian Gulf, and W. the provs. Fars and Laristan. Shape triangular; extreme length, 380 m.: breadth, 250 m.; supposed area, 65,000 sq. m. Pop. alleged to be under 600,000, having greatly decreased of late years through the wars of extermination waged by the Persians on the Guebres or Parsees. Kerman, generally speaking, is mountainous; but the elevation of the high ground varies considerably, from mere hills to lofty ridges, scarcely lower than those of the great mass in which they originate. The principal range divides Nurmansheer from Laristan, and thence runs W. with many ramifications. The interior of the prov. is not irrigated by a single river, and the natives could not possibly exist, but for a few mountain springs, and the diligence used in cutting *karezes*, or subterranean reservoirs for watering the land. The Rud Shuir, which runs through the S. part of Kerman into the Persian Gulf, is very imperfectly known. The climate is accounted the least healthy of any part of Persia; the hills, which are clad with snow nearly all the year, being extremely cold, and the long narrow valleys between them oppressively hot. The winds from the mountains are cool; but, as they bring with them agues and epidemic fevers, the natives prefer sultry weather. The N. portion of the prov., and that close on the coast, are arid, sterile deserts; but in Nurmansheer and a few other central districts, where irrigation has been properly followed up, layers of alluvial soil and rich vegetable mould are found to be exceedingly productive. Wheat, maize, and barley; cotton, tobacco, saffron, and madder are raised with facility, and in the greatest perfection. Dates, oranges, lemons, grapes, almonds, and pistachios, with other fruits of S. Europe, are of common occurrence; and mulberry trees are largely cultivated for the silk-worms, in breeding which the inhabs. have attained considerable celebrity. The gum-plants, the produce of which is not less esteemed than that from Arabia, comprise the asafœtida, mastic galbanum, sandaric ammoniac, sarcacolla, and tragacanth. Much attention is likewise given to the cultivation of the white rose, from which is distilled an *attar*, or essence, highly valued in Asia. Pasturage, however, is a more favourite pursuit than tillage. The breed of sheep peculiar to this prov., called *dumbedor*, is small and short-legged, with a long bushy tail; its wool fetches a higher price in the market than that of any other variety in Persia. Camels also, and goats, are bred in great numbers, as their hair is thought to make a fibre at once stronger and more delicate than that of animals reared elsewhere. Oxen and horses are little attended to. The forests are infested with wild beasts of the cat and bear tribe, and there are many species of serpents, some being highly venomous. On the S. coast sea-fish is abundant; but the pearl-fishery, once very profitable, has been abandoned in consequence of the too great depth of the oyster-beds. The mineral riches might be made a source of considerable wealth, for most metals are abundant; but iron, copper, and sulphur are the only products hitherto obtained. The manufactures comprise fine woollen fabrics, carpets, goats' and camels' hair shawls, coarse linens, and a peculiar kind of matchlock, much esteemed in the E. These articles, with *chenna*, a yellow dye, fruits, and gums, are either sent N. by caravans, or exported from the port of Gombroon.

The inhabs. were formerly almost exclusively Guebres, but the number of these is now less than 40,000. The Persians constitute the chief mass of the pop., but there are also many Belooches and Arabs of different tribes. The government is vested in a beglerbeg, and the prov. is divided into 9 districts, each of which is under a hakun or lieutenant. The taxes on land, and imposts on manufactured goods, are very oppressive, and operate as a great hinderance to industry. The S. part of Kerman, called Moghostan, is not subject to Persia, but to the imâm of Muscat, who receives from it a yearly tribute of 7,000 tomauns. The Arabs of various tribes are governed by their respective sheiks.

KERMAN, or SERJAN (an. *Carmana*), a city of Persia, and cap. of the above prov., 230 m. E. Shiraz, and 340 m. SE. Ispahan; lat. 29° 56′ N., long. 56° E. Pop. estimated at 30,000. This city, which was once more prosperous and extensive than at present, stands on the W. side of an extensive plain, so close to the mountains as to be completely commanded by two of them. The walls, pierced by 4 gates, are high and built of mud, flanked outside by a dry ditch, 20 yards wide, and 10 yards deep. On the S. side of the town is a citadel, in which the governor resides.

Digitized by Google

The bazaar, well supplied with every article of necessity and luxury, is covered in with very elegant domes, built of a beautiful blue stone procured in the adjoining mountains. There are nine good caravanserais within the walls, several mosques and baths, but most of them are in a ruinous condition. The trade of Kerman, however, is still very considerable, and it is celebrated for its manufactures of shawls, carpets, and matchlocks, which are exported to Khorassan, Balk, and Khiva, Arabia, Sinde, and all parts of India. The shawls of Kerman are of coarser quality, but approaching nearly in colour and general appearance to the inferior cashmeres. Immense quantities of the commoner kinds are sent to all parts of Turkey; they are about two yards square, very low in price, and are generally worn by the lower classes in W. Asia.

Kerman, formerly one of the most celebrated cities of the Persian empire, owed much of its former opulence to its situation on the road from Bokhara to Gombroon, a port which has been almost superseded by Bushire. Domestic and foreign wars, however, with repeated pillages, have all but ruined it. In 1794 it was besieged and taken by Aga Mahommed Khan; the walls and public buildings were then levelled to the ground, a licentious soldiery were allowed to pillage it during three months, vast numbers of the inhabs. were put to death, and 30,000 are said to have been sent into exile. From these calamities Kerman is only very slowly recovering, nor does the present state of its trade warrant the conclusion that it will ever attain its former importance.

KERMANSHAW, or KERMANSHAH, a city of Persia, the cap. of Persian Kudistan and of a district bearing its own name; 82 m. WSW. Hamadan, and 320 m. SW. Ispahan; lat. 34° 26′ N., long. 47° 15′ 15″ E. Pop. estimated at 12,000. The city stands a short distance from the right bank of the Kerkah or Karasu, in a beautiful plain open to the S., but inclosed on every other side by lofty mountains. It is surrounded by a substantial brick wall, having round towers at its four angles and a deep ditch in front. The citadel, strongly fortified, is the residence of the beglerbeg, who belongs to the royal family of Persia. The streets are narrow, crooked, and unpaved; but the town is adorned with many gardens, has 14 *hummums* or public baths, 4 mosques, several bazaars, and a spacious caravanserai kept in tolerable repair. Its manufactures consist chiefly of woollen carpets and swords, mostly sent to Bagdad, with cotton, very delicious grapes, and other products of the rich soil belonging to the district. Considerable advantages accrue to the town in consequence of its situation on the great caravan road between Persia, Caubul, and Asiatic Turkey. Great improvements have been made by the existing dynasty in its fortifications and public buildings, and it has become the residence of one of the members of the reigning family, so that its pop. and general importance have been steadily increasing during the present century.

About 6 m. E. of Kermanshaw, on the road to Hamadan and in the N. range of mountains, are the excavations and sculptures of Taki-Bostan. The most considerable of these is an arch cut in the rock, 60 ft. high, 20 ft. deep, and 24 ft. wide; on the top is an emblematic figure flanked by two angels, the sculpture of which is tolerably perfect and in good taste. At the extremity of the arch is the figure of a mounted warrior clothed in chain armour, with a shield on his left arm, a lance in his right hand, a quiver at his side, and a tiara on his head. The horse is well proportioned, and tolerably carved. The representation of a boar-hunt occupies the entire left side of the arch; it is remarkably well executed. At the upper end of another cave, similar in shape and size, is a *basso-relievo* of two kings in the costume of Persepolis, and wearing globular crowns identifying them with members of the Shapour dynasty. Near the entrance of this cave, also, are three figures, two of which are treading on the third, who is prostrate. The origin of these sculptures is a matter of doubtful conjecture: some attribute them to Semiramis, while by others they are ascribed to the successors of Alexander; but, if Silvestre de Sacy's translations of the Pehlvi Inscriptions be correct, they must be attributed to the monarchs of the Sassanian dynasty. (Ritter's Erdkunde von Asien, part ix. p. 367–386.)

The date of the foundation of Kermanshaw is not accurately known, but it is generally attributed to Bahram (Vararanes IV.), the son of Shapour II., about 400 years after Christ. Kobad improved it, and built a citadel, which, after having been almost destroyed by the Turks, was re-established by Kouli-khan, when he restored its independence in 1723.

KERRY, a marit. co. in the SW. part of Ireland, prov. Munster, having N. the estuary of the Shannon, E. and S. the cos. of Limerick and Cork, and W. the Atlantic Ocean. Area, 1,159,356 acres, of which 552,862 are unimproved mountain and bog, and 14,669 water, including the lakes of Killarney, so famous for their scenery (see KILLARNEY). This co. is particularly wild, rugged, and mountainous. Macgillicuddy's Reeks, the highest mountains in Ireland, lie to the W. of Killarney; and several other mountain ridges rise to above 2,000 ft. in height. The coast is deeply indented by Tralee and Dingle bays and the estuary of the Kenmare: Dunmore Head, between the bays now named, in lat. 52° 7′ 30″ N., long. 10° 28′ W., is the most westerly land in Ireland, and consequently in the U. Kingdom. The climate is mild, but also extremely moist. The soil in the low grounds mostly rests on a limestone bottom; it is very fertile, and produces fine herbage, which the mildness and moisture of the climate maintains in a constant state of verdure throughout the year. The arbutus flourishes in the greatest vigour round Killarney, and other places in this co. Large flocks of goats are fed on the mountains, which also depasture great numbers of the pure Irish breed of middle-horned cattle. There are some rather extensive dairy farms; but, speaking generally, agriculture is at the lowest ebb. Tillage farms are, for the most part, very small, and the occupiers miserably poor. The potato is the only article they reserve to themselves; cattle, corn, butter, pigs, and eggs all go to market to make up the rent. Still, however, improvements are taking place; good roads now lead into districts that were formerly next to impervious; and some landlords have laboured, with considerable success, to introduce an improved system of management on their estates, and to meliorate the condition of the occupiers. In some parishes the greater part of the tillage is performed by means of the *loy* or spade, but Scotch and other improved ploughs have recently been introduced. The sea-weed, which abounds along the sea-shore, furnishes an ample supply of manure; but it is in most parts neglected, or injudiciously applied. Property mostly in very large estates, but some of them are leased for ever. The Irish language is in many parts used to the exclusion of the English; and, in consequence, old customs and habits maintain their ground in a remarkable degree. Minerals, though in a great measure unexplored, are of considerable value and importance. Copper mines have been

Digitized by Google

wrought near Killarney, and Valentia Island produces good slate for roofing and flagging. Manufactures can hardly be said to exist. Principal rivers, Feale, Lane, the outlet of the lakes of Killarney, Roughan, and Mang. Principal towns, Tralee, Killarney, and Dingle. Kerry is divided into 8 baronies and 83 parishes; and sends 3 mems. to the H. of C., viz. 2 for the co. and 1 for the bor. Tralee. Registered electors for the co., 5,415 in 1865. In 1861, Kerry had a pop. of 201,800, or 36,259 families, living in 32,178 houses. In the 20 years 1841–61 the pop. declined by 92,080.

KERTSCH, a sea-port town of European Russia, in the Crimea, on a spacious bay on the W. side of the straits of Yenikale. Pop. 12,787 in 1858. The town occupies the site of the ancient *Panticapæum*, the seat of the Bosphorian kings, and once the residence of Mithridates. The quarantine for the sea of Azoff has been established here; and it seems probable that it will, at no distant period, supersede Taganrog as the emporium of that sea. Corn, salt, and hides are the principal articles of export. In the outer road, 5 or 6 m. from the town, there are 19 ft. water; in the inner bay there are 14 ft., and close in shore it shoals to from 9 to 11 ft. During the last war between Russia and Turkey, the allied Anglo-French squadron entered the bay, May 24, 1855, capturing 250 Russian vessels, and a large quantity of guns and stores.

KESMARK (Germ. *Kaisersmarkt*), a royal free town of Hungary, co. Zips, on the Poprad, a tributary of the Vistula, at the foot of the Tatra mountains, 130 m. NE. Pesth. Pop. 3,924 in 1857, of whom about 2,500 are Protestants. The town is surrounded with old and decayed double walls, and entered by three gates, near one of which the Emp. Sigismund, in 1433, erected a large tower, to protect the town against the attacks of the Hussites. Kesmark has several handsome public buildings, as the town-hall, with an elegant tower, and the large Rom. Catholic church; besides a Rom. Catholic high school, Protestant lyceum, and girls' school. Many of its inhabs. are linen weavers and dyers; others carry on a brisk trade with Galicia in wine and garden produce.

KESWICK, a market town of England, co. Cumberland, ward of Allerdale, par. of Crosthwaite, on the Greta, in a well-cultivated valley at the foot of Skiddaw, and contiguous to the N. end of Derwent-water, or Keswick lake, 22 m. S. by W. Carlisle, and 18 m. E. by N. Whitehaven. Pop. 2,610 in 1861. This neat and finely situated town, which may be regarded as the cap. of the English lakes, consists principally of one long street of well-built houses. It has manufactures of linsey-woolsey stuffs and fancy waistcoatings; black lead pencils are also made in the town, of lead from the famous mine in Borrowdale; and the potting of char taken in the lake is a considerable business. Copper mines were formerly wrought in the vicinity, but they have been long abandoned. The principal dependence of the place is on the crowds of visitors to the adjacent lakes and mountains, who are here supplied with lodgings, guides, and conveyances. It has a free school, a national school, a workhouse, and two museums, containing many fine specimens of natural history peculiar to the county. Property, which at present produces above 200*l.* a year, was bequeathed in 1642, by Sir John Banks, chief justice of the Common Pleas, for behoof of the poor of this, his native town.

Keswick lake, or Derwent-water, is about 3 m. in length, by rather more than 1 m. in breadth, extending over an area of 1,282 acres. It has numerous small islands, is embosomed among lofty mountains, and, from its picturesque scenery, is deservedly called the 'gem' of the lakes.

KESZDI-VASARTHELY (Germ. *Neumarkt*), a town of Transylvania, in the Szekler-Land, 45 m. NE. Cronstadt. Pop. 3,460 in 1857. The town has a Protestant gymnasium, several breweries and distilleries, and manufactures of hats, paper, and cloth; but it is chiefly noted for its military establishments. It is the head-quarters of the second regiment of Szekler infantry, in the Transylvanian military frontier, and has a celebrated military school. This institution was founded by the late emperor, Ferdinand I. of Austria, and is supported partly by a royal grant and partly by the Szeklers themselves. The regulation of it is entirely in the hands of the government. On the foundation there are 100 boys, from 6 to 18 years of age, who are fed, clothed, and taught, free of all expense. A few additional scholars are admitted on the payment of about 16*s.* per month. The children, when they have finished their education, are drafted into the infantry, and often rise to the rank of officers. The course of education, besides drilling, includes writing, reading, arithmetic, geography, mathematics, military drawing, and the German language. In fact, all the lessons are given in German, all the books are German, and the children are even obliged to speak German to each other. The national language is never heard within the walls of the school. Hence the Szeklers affirm, that the grand object of the school is to denationalise their children, and make them renounce their native language.

KESZTHELY, a market town of Hungary, in the circ. on the other side the Danube, co. Szalad, near the W. end of lake Balaton, 38 m. SW. Veszprim, and 98 m. S. Presburg. Pop. 3,995 in 1857. Keszthely is a thriving little town, and of considerable importance from the great school of agriculture founded here by Count George Festetits, and known as the Georgicon, which, though no longer in so flourishing a state as formerly, has still several professors and practical teachers. The object of this establishment is to form useful and well-instructed officers and accountants for the management of estates, to give instruction in particular branches of husbandry to the peasantry, and to furnish opportunities for farmers to improve their knowledge of agriculture. The school is divided into six sections: 1. for scientific agriculture and its auxiliary sciences; 2. for the law of property, as affecting landlords and tenants; 3. for practical husbandry, as taught to the peasantry; 4. for forest-planting and the chase; 5. for horse-breeding and training; and, 6. for teaching girls the branches of knowledge connected with housekeeping. The complete course appointed for the pensioners lasts 3 years; but others may select their pursuits, and limit themselves to one or two years, as they think proper, the theoretical course lasting from the beginning of Nov. to the end of Aug. In the Georgicon, large apartments are fitted up as lecture-rooms, depositories for philosophical instruments, and museums; chambers are set apart for the pensioners; and the lower floors are occupied by the farming servants and their families, and by a spacious workshop for carpenters and coopers. The outbuildings comprise stalls for fattening cattle, a shed for sheep, a granary, brew-house, and a house for silkworms and the winding of silk; gardens and orchards of different kinds are laid out for the purpose of teaching horticulture in all its branches, and on a farm set apart for the purpose practical instruction is given in the rotation of crops after the Norfolk system. The other educational institutions are a

Digitized by Google

Catholic gymnasium, a high and normal school. The public buildings comprise, besides the Georgicon, a fine castle, which contains a library of 15,000 vols., 2 Catholic churches, a convent, and a hospital. Wine, from the extensive vineyards in the neighbourhood, is a considerable article of trade, and several hands are employed in weaving woollen fabrics. (Bright's Travels in Lower Hungary, pp. 360–389.)

KETSKEMET, or KUZKEMET, a market town of Hungary, circ. on the N. side the Danube, co. Pesth, 50 m. SE. the cap., on the railway from Pesth to Szegedin. Pop. 42,890 in 1857. The houses are generally low, the streets long, narrow, and crooked, and the surrounding districts of a monotonous character. There are five churches (two Rom. Cath., and one each belonging to Greeks, Lutherans, and Calvinists), a Franciscan convent, a reformed college and gymnasium, a *Piarist* college, a normal school and a school of design, an orphan asylum, and a military hospital. The breeding of horses, cattle, and sheep is the chief employment of the pop.; and there are some tanneries and soap factories.

KETTERING, a market town and par. of England, co. Northampton, Huxloe hund., on an affluent of the Nen, 14 m. NE. Northampton, and 65 m. NNW. London, on the Midland railway. Pop. of town 5,498 and of par. 5,845 in 1861. Area of par., 2,840 acres. The centre of the town comprises a spacious area, surrounded by well-built houses and shops, with a commodious sessions-house; but in the suburbs are many low thatched tenements of a mean and wretched appearance. The church, considered a fine specimen of ecclesiastical architecture, has an elegant embattled tower at its W. end, surmounted by a light crocketted spire: the living is a rectory. There are places of worship also for Wesleyan Methodists, Baptists, Independents, and the Society of Friends. Sunday schools are attached to all, except the last; and there is a small free school. This, and an almshouse for 6 poor widows, are the only endowed charities of the town. Several hundred weavers are engaged at Kettering, and the neighbouring villages of Rothwell and Desborough, in making silk plush for hats. A great number of hands were formerly employed in woollen and worsted weaving, but this branch of industry appears to have declined of late years.

KEW, a village and par. of England, co. Surrey, hund. Kingston, on the S. bank of the Thames, 7 m. W. London, on the London and South Western railway. Pop. of parish, 1,099 in 1861. Area, 230 acres. This village, which is connected with Brentford on the opposite side of the river by a stone bridge of 7 arches, consists principally of the houses on and near a large and neatly kept green. The par. church is a small brick structure with a turret at the W. end. Many handsome residences are scattered over the village, but none deserves particular mention except Kew House, or Palace, a red brick building of the age of James I., for many years the favourite residence of George III. and his queen. It was taken on lease from S. Molyneux, esq., by Frederick, prince of Wales, and was greatly improved in its interior fittings by Kent. George III. acquired the property in fee simple, and it is still occupied by members of the royal family, or persons belonging to their households. Near this house, and close to the river's bank, a new palace was commenced by George III., but the situation and plan of the building proved to be ill chosen. It was never completed, and was ultimately taken down in 1827. The grounds, which were first laid out by Sir William Chambers for Frederick, prince of Wales, have since been greatly improved. They are under the management of the commissioners of woods and forests, and consist, at present, of what are called the pleasure grounds, comprising about 130 acres, and of the royal gardens, comprising about 75 acres, the whole open to the public every day including Sunday. The improvements in Kew Gardens, which began in 1840, have been on a very grand scale, and they now form one of the favourite resorts of the Londoners, having been visited in 1861, by 480,070; in 1862, by 550,132; and in 1863, by 403,418 persons. Rather more than one-half of the whole of these visitors came on Sundays. The palm-house, completed in 1848, is somewhat in the form of the hull of a large ship with the keel upwards, having attached to it the hulls of smaller ships, one at each end, the ribs being of cast-iron, and the intermediate spaces of glass. It is 362 ft. in length, the central compartment is 100 ft. in width, and 66 ft. in height, and the wings respectively 50 ft. wide and 30 ft. high. The central portion has a gallery all round, reached by a spiral stair, at the height of 30 ft. from the floor. The glass is tinted green to mitigate the intensity of the light, and the structure is heated by hot-water pipes distributed beneath the floor, the smoke being conveyed by an under-ground flue to an ornamental tower at a little distance. Opposite the palm-house is a fine piece of water; and the whole garden, whether reference be made to its arrangements, or to the infinite variety of rare and valuable plants with which it is furnished, reflects the highest credit on the public liberality, and on the taste of those by whom it has been planned and directed. In the pleasure-gardens are different grotesque, if not very elegant, buildings. The largest and most celebrated of these is an octagonal Chinese pagoda of 10 stories and 163 ft. high, from the top of which is an extensive view of the surrounding country.

KEYNSHAM, a market town and par. of England, co. Somerset, hund. of its own name, at the confluence of the Chew with the Avon, 5 m. ESE. Bristol, 100 m. W. London by road, and 113¼ m. by Great Western railway. Pop. of par. 2,190 in 1861. Area of par. 3,330 acres. The town is built on a rock, and consists of a single street, about a mile long. The church, which stands in the centre of the town, is a large and handsome edifice, with a fine lofty tower at its W. end, and some curious monuments: the living is a vicarage, in the gift of the duke of Buckingham. The Wesleyan Methodists and Baptists have places of worship, to each of which, as well as to the church, Sunday schools are attached. A well conducted charity school also furnishes a plain education to poor children of both sexes. The river Chew runs through the E. end of Keynsham, and falls into the Avon at the bridge, which is of stone, and consists of 15 arches: another bridge crosses the Chew on the Bath road. The tides of the Avon ascend up to the town. The clothing trade, formerly considerable, has now almost wholly fallen to decay, though a few people are still employed in spinning and winding for the clothiers of Bradford and Shepton Mallet. Coarse linen-weaving has been introduced within the last 30 years, with little success; but a good deal is done in malting.

KEY-WEST, a small island from 5 to 6 m. in length, by 1 in width; 56 m. SW. from Cape Sable, in Florida. It is one of the Florida keys, or of that extensive circular range of low islands, banks, and reefs, which fences the coast of Florida, and forms the northern boundary of the Gulf Stream, from the Tortugas islands on the W. round to Cape Florida on the N. A lighthouse erected on

Digitized by Google

the SW. point of the island lat. 24° 29′ N., long. 81° 55′ W., has a fixed light elevated 83 ft. 6 in. above the sea. The town of Key-West, near the NW. part of the island, has about 2,500 inhabs., and has an excellent harbour, with about 25 ft. water. A safe passage, about 6 m. in length, leads by Key-West from the Gulf Stream to the Gulf of Mexico. It has 12 ft. water at ebb tide, and vessels from the N. bound for New Orleans and Mobile, or from the latter for the former, by passing through it, avoid the delay and danger of the more westerly passage round the Tortugas.

Owing to the frequent accidents to shipping from coming in contact with the banks and reefs in this dangerous vicinity, the American government have organised an establishment at Key-West for the assistance of ships in distress, and made it the seat of an admiralty court for the adjudication of claims for salvage. The former consists of 15 licensed vessels with crews of about 10 men each. These are kept constantly cruising about on the look-out for ships in distress or wanting pilots.

KHARKOFF, a government of European Russia, having on the N. Tchernigoff and Koursk, on the E. Voronetz, on the S. Ekaterinoslaff, and on the W. Poltava. Area, 20,931 sq. m., pop. 1,582,571 in 1858. This, like the other governments of Little Russia, has a flat, monotonous surface, and a very fertile soil. It has nearly 470,000 deciatines of forests. Principal rivers, Donetz, Orkol, and Vorskla; but none of them are navigable, at least, for any considerable distance. All sorts of corn are raised, the produce in ordinary years amounting to above 5,000,000 chetwerts, of which about 1,000,000 are exported. Flax and hemp, tobacco, and hops, are also raised, and the potato is extensively grown. Cattle excellent; there are few peasants without bees. With the exception of distilleries, which are numerous, and some tanneries, and establishments for the preparation of tallow and saltpetre, manufacturing industry can hardly be said to exist. The pop. consists of Little Russians, Great Russians, and Cossacks. Some regiments of cavalry are colonised in this government.

KHARKOFF, the cap. of the above government, on the Lopanh, 295 m. NWN. Odessa. Pop. 45,156 in 1858. The town is built of wood; has narrow, crooked, and dirty streets; the ramparts by which it was formerly surrounded have been converted into gardens and public walks. It is the residence of the provincial authorities, and has a cathedral, a gymnasium, and an ecclesiastical seminary. Kharkoff is the seat of a university, founded in 1804, which has 90 professors and masters, and, on the average, about 500 pupils. It possesses a pretty good library, and a valuable collection of medals. This town is the seat of a considerable commerce. Four fairs are held each year, of which that called Krechtchenski (Jan. 3–15), and that of the Trinity, are the most extensive. One of the other fairs is principally for wool.

KHELAT, or KELAT, a city of Beloochistan, of which it is the cap., and a fortress of considerable strength, now in possession of the British; on an elevated site, on the W. side of a highly cultivated plain about 250 m. N. the Indian Ocean, and 240 m. S. by W. Candahar; lat. 29° 7′ N., long. 65° 45′ E. Pop. estimated at 20,000, chiefly Beloochees, Brahooes, Hindoos, and Affghans. The town, of an oblong form, is encompassed on three sides by a mud wall, 18 or 20 ft. high, flanked at intervals of 250 paces, by bastions pierced, as well as the wall itself, with numberless loopholes for matchlocks. The defence of the fourth side is formed by the W. face of the hill, on which the town is partly built, being cut away perpendicularly. On the summit of this eminence stands the palace of the khan, enclosed by a mud wall, with bastions, kept in better repair than any other portion of the fortifications. In 1839, Major Willshire said, 'The defences of the fort, as in the case of Ghiznee, far exceeded in strength what I had been led to suppose from previous report; and the towering height of the inner citadel was most formidable both in appearance and reality.' (Parl. Report on Khelat.) The town is, however, commanded by heights to the N. and W.; it has three gates, and above 2,500 houses within the walls; and about half as many more were comprised in the suburbs. The houses are of half-burnt brick, on wooden frames, and plastered over with mud or chunam. The streets are generally broader than is common in the E., and have a raised footway on either side; but their centre is a receptacle for all sorts of filth; and they are dark and gloomy, from the upper stories of the houses nearly meeting. The markets are well furnished with flesh, vegetables, and other necessaries, at a cheap rate; and the town is supplied with excellent water by a spring, which is tepid during the night, but after sunrise becomes cold, and remains so the whole day. Some water-mills are turned by the stream from this source. Khelat has some trade and manufactures, respecting which see BELOOCHISTAN.

KHERSON, a gov. in the S. part of Russia in Europe, on the N. shore of the Black Sea, between the rivers Dniestr, on the W., and Dniepr, on the E. Area, 28,305 sq. m. Pop. 1,027,459 in 1861. Besides the great boundary rivers, already specified, it is divided into two not very unequal portions by the Bug. In the N. part of the government, the surface is undulating and covered with immense forests; but elsewhere it consists mostly of an immense steppe, without trees, and covered with grass the height of a man. Generally, the portion on the W. side of the Bug is decidedly more fertile than that on the E. side. Climate in extremes, the rivers being mostly frozen over for a short time during winter, while in summer the thermometer rises sometimes to above 25° Réaum. Agriculture has made little progress, and is but a secondary pursuit, the rearing of cattle and sheep forming the chief employment of the inhab. The breed of sheep has been much improved, and is now the best in the empire. Among the horned cattle, buffaloes are common. Flax and hemp, tobacco, saffron, and liquorice, are all cultivated; and a good deal of an inferior acid wine is made. There are establishments for the cleaning and sorting of wool, tanneries, tallow and candle works, with manufactories of cloth. The commerce of the government centres entirely at Odessa and Kherson, and is very extensive.

KHERSON, the cap. of the above government, on an eminence on the right bank of the Dniepr, about 60 m. above Kinbourn Fort, at the entrance of the estuary to that river. Pop. 40,430 in 1858. The town was founded in 1778; was fortified in 1780; and soon after became a large and flourishing town. Owing, however, to the difficulty of navigating the Dniepr, which, for 15 m. below Kherson, is shallow and encumbered with shifting sand banks, Odessa, founded in 1792, soon took precedence of it as a commercial emporium, and it began to decline. It is divided into four distinct parts: the citadel, the admiralty, and the Greek and military suburbs. Within the first are the government buildings, arsenal, prison, barracks, and the cathedral. The latter is the burial-place of the celebrated Prince Potemkin, the powerful favourite of Catherine II., who died near Yassy,

Digitized by Google

in 1791. In the admiralty are the docks, for constructing ships of war, cut out of the limestone rock. They are sent down the river on machines, called camels, but only when there is a large flood. The Greek suburb is inhabited by the burgesses, and the military suburb by sailors and artizans. Within these few years a part of the mast trade that used formerly to be confined to Riga, has been transferred to Kherson; and, besides masts, staves, planks, flax and hemp, corn, cordage, tallow, wool, of which it is a principal market, are sent down the Dniepr to Kherson.

John Howard, the celebrated English philanthropist, expired at Kherson, on the 20th of Jan., 1790; and is interred about 3 m. N. from the town, where an obelisk has been erected to his memory.

KHIVA, KHARESM, or ORGUNJE (an. *Chorasmia*), an indep. khanat of Turkestan, in Central Asia, properly comprising only a narrow strip of fertile land along the Oxus, in the lower portion of its course. Of late years, however, it has established a supremacy over the wandering Turkman hordes to the S. and W., and holds Mervè (Murù), with its territory, on the road between Khorassan and Bokhara. The dominion of the khan extends between the 36th and 44th degrees of N. lat., and 52nd and 64th of E. long., having E. the Karakalpack territories and Bokhara, S. Afghanistan and the Persian prov. of Khorassan, W. the Caspian, and N. the Kirghiz Steppe and the Sea of Aral. The Oxus is the great fertiliser of the tract it passes through; many canals communicating with it have been cut for the purpose of irrigation, some of which are 30 m. in length; and the cultivated lands in the neighbourhood of the capital are surrounded with wet ditches. The climate and products are much the same as in Bokhara; the summer is warm, the air dry, and evaporation rapid; the winter is short, and ice lasts only a few days at a time. Agriculture is better attended to in the small extent of productive land comprised in this khanat than in some of the neighbouring countries. The lands, after being irrigated, are manured; but animal manure is scarce, from the fæces of the cattle being used as fuel, and their being seldom stalled. Wheat, barley, *djugari* (*Holcus saccharatus*), millet, sesamum, oleaginous plants, lentils, fruits, linseed, cotton, hemp, flax, and some rice are grown. The vine thrives well; but the inhab., being chiefly Mohammedans, little wine is made. The distillation of brandy from raisins has, however, been introduced by the Persians; and, out of the capital, the inhab. indulge pretty freely in its use. An intoxicating liquor, as well as a narcotic product for smoking, is obtained from hemp. Little tobacco is grown. Many of the fruits are good, and the melons are excellent; but the culture of fruit-trees is nearly abandoned for that of grain or fodder. Wood is sufficiently abundant in the N., and is not dear in the capital; but over all the desert the only vegetation is a few stunted bushes. Horned cattle are few; sheep and goats are much more numerous, their flesh, with that of the horse, forming the chief animal food of the inhab. Camels are the principal beasts of burden, and almost every khivan possesses one. Agriculture and cattle rearing occupy most of the settled pop.; but some cotton and silk stuffs and shawls are made by the women, and exported to the neighbouring countries. The dominant race in Khiva, as in Bokhara, is the Uzbek, to which the khan belongs; the rest of the pop. consists of Ouigours, Turkmans, Karakalpacks, Tadjiks, about 2,000 families, chiefly prisoners of war from Bokhara, and a few Afghans, Jews, Armenians, Persians, Eimauks, and Kirghiz. The Uzbeks enjoy no privileges over the rest, but they compose the chief portion of the khan's army. The Turkmans are altogether nomadic, and live principally by plunder, especially the capture and sale of slaves. They seize upon the subjects of Russia on the Caspian, and make many inroads into Khorassan: Bokhara and the whole of the Turkestan is supplied by them with Persian captives. It is estimated that from 30,000 to 40,000 of the pop. of the khanat are slaves. They have frequently a piece of land given to them to cultivate, or are permitted to exercise some handicraft, paying an annual rent to their masters for the privilege, from the produce of which they are afterwards frequently able to ransom themselves. No foreign slave, however, even after the purchase of his liberty, is permitted to leave the country. Meyendorf, in comparing this khanat with that of Bokhara, observes:—'Though the inhab. of the two countries are of the same race, and profess the same religion, the schools of Khiva have never enjoyed the same reputation as those of Bokhara; the Khivans are more barbarous than the Bokharese, as is attested by an inferior agriculture, worse habitations, a more limited commerce, less wealth, and a more savage mode of life.' (Voyage à Boukhara, p. 111.) According to Burnes, the Khivans are at best but an organised banditti, protected by the natural strength of their country. Dreadful scenes of cruelty and barbarism are occasionally witnessed even at the capital. M. Arminius Vambery, a Hungarian gentleman, who travelled through the country, in 1860-61, in the disguise of a dervish, describes one of these atrocious spectacles:—'In the last court (of a prison, at the city of Khiva), I found about 300 Tchaudors, prisoners of war, covered with rags; they were so tormented by the dread of their approaching fate and the hunger which they had endured several days, that they looked as if they had just risen from their graves. They were separated into two divisions, namely, such as had not yet reached their fortieth year, and were to be sold as slaves, or to be made use of as presents, and such as from their rank or age were regarded as Aksakals (grey beards) or leaders, and who were to suffer the punishment imposed by the khan. The former, chained together by their iron collars in numbers of ten to fifteen, were led away; the latter submissively awaited the punishment awarded. They looked like lambs in the hands of their executioners. Whilst several were led to the gallows or the block, I saw how, at a sign from the executioner, eight aged men placed themselves down on their backs upon the earth. They were then bound hand and foot, and the executioner gouged out their eyes in turn, kneeling to do so on the breast of each poor wretch; and after every operation he wiped his knife, dripping with blood, upon the white beard of the hoary unfortunate. Ah! cruel spectacle! As each fearful act was completed, the victim liberated from his bonds, groping around with his hands, sought to gain his feet. Some fell against each other, head against head; others sank powerless to the earth again, uttering low groans, the memory of which will make me shudder as long as I live.' (Travels in Central Asia, by A. Vambery, 8vo., London, 1864.) M. Arminius Vambery and other travellers express fears that Russia will gradually take possession of Khiva. After reading the above, any civilised being must exclaim 'God speed Russia!'

The trade of such a country may be described in a few words. Four routes exist for communication with Russia: one through the Kirghiz steppe, W. of the Aral sea, to Orenburg; a second

Digitized by Google

by way of Sarachak, or Sarachik, on the Oural, also to Orenburg; a third through Sarachak to Astrakhan; and a fourth from Khiva to Karaghan, on the E. shore of the Caspian, whence goods are sent by sea to Astrakhan. About 2,000 camels go annually to Orenburg, Astrakhan, and some towns of Caubul and Persia, with wheat, barley, silk and cotton fabrics, and yarn; and about a dozen large boats come annually from Astrakhan to Karaghan and the Gulf of Manghislak, with the products of Russia and the West, to be exchanged for those brought by the caravans from Khiva. The chief imports are slaves, coin, iron and copper, wrought and unwrought; handkerchiefs, wax, honey, sugar, tea, which, as in Bokhara, is a favourite article; cochineal, spices; and hardware. The commerce with Persia is insignificant. The merchandise which goes to Asterabad is conveyed on camels, at a charge averaging from 3½ to 4 roubles per *pood*, under the conduct of Turkman guides. The trade of Khiva is solely in the hands of Turkmans, Khivans, and Persians; none but Mohammedan merchants being suffered to transact business within the khanat. No foreign merchants pass through or into the country with ease or safety; when not openly robbed of a large portion of their goods, the caravans are delayed by the khan's officers, the bales of merchandise are opened, and much property has been at times extorted. The khan demands duties at the port of Manghislak on the Caspian, which lies opposite Astrakhan, and sometimes on the Jaxartes, E. of the Aral Sea. In order to reach Bokhara by a route avoiding Khiva altogether, the Russians attempted, in 1820, to send caravans by way of the latter river; but the khan took umbrage at a measure which turned the traffic from his own territories, and sent an army to the Jaxartes, which intercepted a caravan, and occasioned the destruction of its merchandise. The commercial duties realised by the khan amount to, perhaps, half his total revenue, which latter is roughly estimated at 2,000,000 roubles, the remainder of this sum being made up of 1-5th of the produce of every predatory excursion of his subjects, a family tax of 3 ducats a year, taxes on war-horses, and on land cultivated by slaves. A regular transit duty of 2½ per cent. *ad valorem* is levied on all kinds of merchandise passing through the country.

The government is despotic: for judicial affairs, each town has its *atalyk*, or judge; and in the cap. is a central court of justice in the last resort, composed of the *cadi* or chief priest, the four ministers, and other members nominated by the khan. The khan may sometimes raise a force of 10,000 men, and has a park of nine pieces of ordnance. His troops, which are mostly cavalry, are entirely composed of Uzbeks and Turkmans, and armed like those of Bokhara: some of the Turkmans carry bows and arrows. There are in the khanat, besides Merve, only two towns worth notice,—Khiva, the cap. and seat of government, and Orgunje, the chief commercial town, and largest of the two. Khiva was tributary to Bokhara till the late khan rendered it independent, early in the present century. Political relations have long existed between Russia and Khiva, envoys having been sent from the one to the other as early as the time of Peter the Great. Latterly, the Russians have determined to put an end to the robberies committed by this horde; and though the impracticable nature of the country has hitherto hindered them from reaching Khiva, there is little doubt of their ultimate success.

KHIVA, a town of Central Asia, cap. of the above khanet, and residence of the khan; in an irrigated and fertile plain near the Oxus, 290 m. WNW. Bokhara, and 720 m. SSE. Orenburg, on the high road between those two cities. Pop. probably from 10,000 to 12,000. The town is surrounded by a mud wall and wet ditch, and contains about 700 houses, the suburbs comprising 1,200 more. Khiva has a palace, which, like nearly all the rest of the dwellings in the town, and in the khanat generally, is of mud, though placed upon an eminence composed of stone. The only stone buildings in the town are three mosques, one having a handsome minaret, a school, and a caravansary. Khiva is externally picturesque, being surrounded with gardens; but its streets are so narrow as scarcely to admit a laden camel. Its pop. is very mixed; its chief trade is in slaves, for which it is the largest mart in Independent Turkestan. The way in which slaves and prisoners of war are brought into Khiva is thus described by M. Arminius Vambery, the Hungarian traveller, mentioned in the preceding article:—'Next morning I did really see about a hundred horsemen arrive from the camp covered with dust. Each of them brought at least one prisoner with him, and amongst the number, children and women, also bound either to the tail of the horse or to the pommel of the saddle; besides all which, he had buckled behind him a large sack containing the heads of his enemies, the evidence of his heroic exploits. On coming up he handed over the prisoners as presents to the khan, or some other great personage, then loosened his sack, seized it by the two lower corners, as if he were about to empty potatoes, and there rolled the bearded or beardless heads before the accountant, who kicked them together with his feet until a large heap was composed, consisting of several hundreds. Each hero had a receipt given to him for the number of heads delivered, and a few days later came the day of payment.' (Travels in Central Asia, by A. Vambery, London, 1864.)

KHOI, a town of Persia, prov. Azerbijan, and cap. of a distr. 70 m. NW. Tabriz. Pop. about 5,000 families, or 30,000 inhab. It is situated on a tributary of the Kur, about 25 m. N. from the lake of Urmiah, and is a handsome, well built town, in much better repair than most others in Persia. It has few mosques or large public buildings; but the regular streets, shaded with avenues of trees, give the town, on the whole, an appearance of respectability and even grandeur. A large and handsome bazaar, with a caravansary, furnishes ample accommodation to the merchants, who carry on a considerable trade with Turkey and E. Persia. The suburbs were formerly inhabited by about 600 Armenians; but their number has greatly decreased since the war with Russia, when most of them migrated N. of the Araxes. The plain of Khoi is celebrated as the scene of a great battle fought in 1514 between Shah Ismael and Selim I., in which the Turks, though the most numerous, were signally defeated.

KHOJEND, a town of Indep. Turkestan, in Central Asia, khanat of Khokan, near its W. extremity, cap. distr. of same name, on the Jaxartes, 90 m. W. Khokan, and said to be as populous as that city, or Samarcand, from which it is 150 m. NE. It is built on rising ground, and protected by walls, which, however, are much decayed on the S. and W. sides. It is surrounded by wet ditches, and intersected by canals. It is of high antiquity; and near it, Nazarov says, are some remarkable ruins. Khojend has manufactures of coarse cotton goods, and a brisk trade in these, and in Russian merchandise. It is the station at which the caravans entering the khanat from

Digitized by Google

Bokhara pay toll, as the town of Usch is for those entering from the Chinese dominions.

KHOKAN, KOKAN, or FERGHANA, an indep. khanat of Turkestan, in Central Asia, between lat. 40° and 45° N., and long. 67° and 75° E.; having N. the Kirghiz steppe, E. and SE. Chinese Turkestan, S. the table-land of Pamere and Bokhara, and W. the desert territory of the Karakalpacks. It is, for the most part, mountainous, comprising a portion of the region which forms the W. wall of the great table-land of E. Asia. (See ASIA.) The Jaxartes (Sir or Sihoon), which rises not far beyond the E. boundary, traverses it E. to W., about its centre, watering many fertile tracts. Khokan is divided into 8 provinces or districts. Great extremes of climate are experienced at different seasons. The products are very similar to those of the countries to the S. and W. This khanat has a greater extent of cultivable and pasture land than Bokhara. In the S., corn and fruits, especially grapes and melons, grow in great perfection; and a proverb of Central Asia praises the 'pomegranates of Khojend with the apples of Samarcand.' This was the patrimonial kingdom of the Emperor Baber, who celebrates in lively terms its beauty and fertility. Cotton and the mulberry are articles of constant culture, silk being the chief staple, and one for which Khokan is famous. The pastures on the Jaxartes are excellent: sheep are the principal live stock, and wool is an important product. The camel, horse, and ass are extensively used; and horse-flesh is a common article of food. Game is very plentiful. Coal, iron, copper, jasper, and lapis lazuli are the chief mineral products. The use of coal has been long known in Khokan, since Abulfeda speaks of 'stones that flame and burn' being found there; and this important mineral may, at no very distant period, become a powerful auxiliary in civilising this, at present, semi-barbarous region. The inhabs. are mostly Uzbeks; to which race, as in Bokhara and Khiva, the khan belongs. They are Mohammedans, and equally bigoted and strict in their religious customs with the Bokharese. The dialect they use is the Jagatai-Turkish. The rest of the pop. are chiefly Tadjiks (see BOKHARA) and Kirghiz, who inhabit the N. and E. The Tadjiks are deprived of the right of property, which they enjoy in Khiva and Bokhara, and are only suffered to cultivate the soil under the Uzbeks. After agriculture, and the rearing of sheep and silkworms, the chief occupation of the people is the manufacture of embroidered silks and cotton goods. The former are much worn by the Kirghiz hordes; the latter are sent in large quantities to Bokhara, the returns being made in Russian goods, as iron, steel, woollen cloths, otter-skins, cochineal, vitriol, and sandal-wood. Shawls and other Indian manufactures come from Cashmere and the Punjab, by Caubul and Balkh. The trade between Khokan and China has been long established. It is related by Ferishta, that 'when Baber was prince of Fergham, a rich caravan of Chitta and China, which was crossing the mountains of Andijan, was buried in the snow. He ordered all the goods to be collected, and sent messengers to China to proclaim the accident, and bring the owners or their heirs to his court. Upon their arrival, at the end of *two years*, he entertained them hospitably.'

Besides the roads to Bokhara, Kabul, and Yarkand, there is a caravan route of 70 days' journey to Semipalatinsk (lat. 50° 30' N., long. 80° E.) on the Irtisch, one of the principal seats of Russian trade; to which there is a shorter road, of 50 or 55 days, from Tashkand (lat. 43° N., long. 69° E.), one of the chief towns of Khokan. The direct routes to Peshawur over the Pamir steppe are extremely difficult, and can be attempted only in summer. About 300 or 350 m. from Khokan, and about 400 m. from the Sea of Aral, is the Russian fort of Ak Masjid, on the Sir. Steamers can approach within 30 m. of Tashkand. (Report on the Trade of Central Asia (Official), London, 1864.) A duty of 2½ per cent., *ad valorem*, is laid on all merchandise imported by Soonite Mussulmans, and 5 per cent. on the goods of all other individuals passing the frontier; but these duties are levied with little regularity. Internal commerce is entirely free, as in Bokhara, and the trade is second only to that of the last-named country. Each town possesses at least one caravansary, and has stated fairs, at which a good deal of business is transacted. The following are the subdivisions of Khokan:—Khokan, Marghilan, Andiján, Narmangán, Shehr-i-Khán, Khojand, Nou, Uretappa, Chúst, Kásán, Ispárah, Kelwa, Karakchi, Tashkand, Hazrat Sultán, Gultala, and Peskak. Besides the cap., the chief towns are Andejan, Khojend, Turkestan, and the others which give name to the several provs. The government is despotic; the khan maintains an army of about 10,000 cavalry, which he can, on an emergency, increase to 30,000. According to some Chinese records, it would appear that this country was formerly subject to China; it has however, for many ages, thrown off its allegiance. In the early part of the present century, many of the adjacent Kirghiz tribes were reduced to subjection; but, about 1830, the khan having supported the Mohammedans of Cashgar against their Chinese masters, was totally defeated in a great battle, and his territories invaded by the latter; since which the power of Khokan has been on the decline. This and the neighbouring countries are interesting, from having been the seats of nations whose armies have frequently changed the political face of Asia, and even in some degree of Europe. Besides giving birth to Baber, the conqueror of Hindostan, who ascended the throne of Ferghana in 1494, Khokan and its vicinity abound with localities intimately connected with the history of Jenghiz Khan and Timour.

It is probable that this country will, at no distant period, be united to Russia. The boundary between Russia and Khokan, as determined about 1828, was fixed at the Kuk-su, or 'Blue river,' but the Russians have long ago crossed that river, and erected forts on the Khokan side.

KHOKAN, a city of Central Asia, cap. of the above khanat, and seat of its gov., on the Jaxartes, 230 m. NE. Samarcand, and about the same NW. Cashgar. Pop. estim. at 75,000. Khokan is an open town, but contains a palace fortified with a wall of mud, of which material most of the houses in the town are constructed. The only exceptions are three bazaars, built of stone, open twice a week for the purposes of trade; some ancient monuments in different parts of the city, and some large stables constructed of brick, and belonging to the khan. There are a great many mosques and public schools, and several caravansaries. Wheeled carts, or 'arabahs,' are common. Among the pop. are many Cashmerians, and some Hindoos, Jews, Nogai-Tartars, and Russians. The streets are narrow and unpaved, but its vicinity is very productive, and sprinkled with numerous gardens, cultivated fields, meadows, and villages.

KHONSAR, a town of Persia, prov. Irak-Adjimi, 82 m. WNW. Ispahan; lat. 30° 7' N., long. 50° 26' E. It is said to contain 2,500 families, or from 12,000 to 13,000 people. Its situation is singularly interesting and romantic, at the base of

Digitized by Google

two ranges of mountains, running parallel to each other, and so very close, that the houses occupy the bottom, and, at the same time, the face of the hills to some height. The town is about 6 m. long, but only ¼ m. broad, and each house is separated and surrounded by its own garden. The hills afford an ample supply of water; and the appearance of the black and barren rocks, without a particle of vegetation hanging over the gardens, forms a striking contrast with the luxuriant and variegated foliage of the plantation. No corn of any kind is grown in the valley, but the fruit is so abundant, that it alone enables the inhab. to procure in return every article either of necessity or convenience.

KHOOLOOM, KHULM, or TASH-KURGHAN, a town of the khanat of Koondooz, in Central Asia, on the Khulm river, a tributary of the Oxus, and on the high road between Balkh and Koondooz, 40 m. E. by S. the former, and 68 m. W. by S. the latter city. Pop. estimated at 15,000. The houses are built of clay and sun-dried bricks, of one story, with domes, in the usual fashion of the country, and each stands by itself in a walled inclosure, often containing fruit trees. The streets are straight, of a moderate breadth, intersecting each other at right angles, and have commonly a stream of water running through them. The town is surrounded by a wall of earth, with wooden gates; a sufficient protection against sudden incursions of horsemen. It is also guarded by two forts, one on an eminence, on the right bank of the river to the SE.; the other on the left bank, and on the plain: both are of earth, and of no strength. There are 4 tolerably good serais for travellers. The inhabs. are chiefly Tadjiks and Caubulees, with a sprinkling of Uzbeks. The shops for dyes and drugs are usually kept by Hindoos, who also act, in a small way, as bankers. The vendors of dried fruits are mostly from Caubul. The Uzbeks engage little in traffic. They are all, rich and poor, dressed much alike, in long gowns of striped cotton ginghams. Bazaars are held every Monday and Thursday, when horses, asses, mules, camels, cows, sheep, and goats, are brought to their respective markets. A sheep sells at from two to four rupees; they are of the large tail variety, and the fat of the tail, and along the back, is commonly one-third of the weight of the sheep, including the bones. Cotton cloths, cotton in the pod, tanned leather, raw hides, fuel, grapes, raisins, pistachio nuts, pomegranates, dried plums, rock salt, brown leather boots with iron-shod heels, dyes, as the pomegranate bark, madder (indigenous), and indigo, from Hindostan, are exposed for sale, along with blankets of fine wool from Chitral, and raw wool from thence and Budukhshan. Printed chintzes, quilts, and turbans are also brought from India. Coarse saddlery is much in request. There is one market entirely for melons, which are raised in this neighbourhood in great quantities.

Old Khulm (now entirely destroyed), is situated about 4 m. from Tash Kurghan. It was a place of importance in the time of Khilich Ali (a former chief of Balkh); but its situation on the plain exposed it to predatory incursions; and the Hazaurehs dammed up or diverted the course of the river, upon which the fertilisation of its soil depended. The chief therefore removed his capital to Tash-Kurghan, much to the regret of the people of Khulm, whose orchards had been celebrated throughout the E. for the quantity and quality of their produce.

KHORASSAN (*country of the sun*), a prov. of Persia, lying between the 31st and 38th parallels of N. lat., and the 53rd and 62nd degrees of E. long., being bounded NE. and N. by the Oxus and country of Balkh; S. by Caubul and Seistan; and W. by Irak, Asterabad, and Daghestan. Its boundaries, however, have been very different at different times; and its present area, which is small comparatively with the great extent of country that it comprised prior to the invasion of the Affghans, is roughly estimated at about 80,000 sq. m. Pop. believed to amount to 1,900,000. Its surface is much diversified by plains and mountains; a large portion consists of arid rocks, destitute of vegetation or fresh water, and of salt and sandy deserts, among which may be found a few fertile oases. The Elburz range of mountains crosses the N. part of the prov. eastward, and between this lofty ridge and the Caspian Sea is an immense uninterrupted plain, which includes the steppe of Khiva, and forms a part of that extensive flat called by the natives Dusht-el-Kipchauk. That portion of the plain which belongs to Khorassan is without a single cultivated spot or permanent habitation, and its scanty pop. comprises only a few tribes of wandering Turkmans. At the foot of the mountains, however, there are many rich valleys, watered by numerous rivulets, and formerly well peopled and cultivated. This district, known in Persia as the *Attock*, once comprised several large towns, all of which are now in ruins, and totally deserted, in consequence of the incessant attacks of the Turkmans, who have obtained full possession of the whole tract. The Elburz mountains send ramifications southward, which penetrate from 60 to 100 m. into the plain. This range contains considerable quantities of iron, which, however, is not wrought: the turquoise mines of Nishapoor are rich, and if managed with skill would yield large revenues; but the exorbitant demands of the Persian government on the tenants of the land have led to the closing of many of the most productive mines. (See NISHAPOOR.) In this portion of the country are many fertile tracts, which, were there any security for property, would no doubt be cultivated and well peopled. The valley of Mushed is of great length, commencing about 10 m. NW. of Sheerwan, and extending in a SW. direction for upwards of 50 m. beyond Mushed. Its breadth varies from 12 to 30 m., and it comprises, besides Mushed (which has a pop. of 30,000), the towns of Chinnarán, Radkan, and Koochan, with a great extent of good land, cultivated by Koordish settlers. The W. limit of Khorassan is nearly that of the great saline desert, which forms its predominating feature. This tract, which, though considerably more lofty, is considered to be connected with the desert N. of the Elburz ridge, skirts the districts of Teheran, Kashan, and Ispahan, insulates that of Yezd, and extends from Toorsheez southward to the confines of Fars, Kerman, and Seistan, including hardly any habitable country except that near Beerjoon and Ghayn. Its E. limit is indicated by a line connecting the towns of Herat, Subzawar, Furrah, and Dooshak. The nature of this desert varies much in different parts. In some places it produces a few of those plants that thrive in a salt soil, while in others it consists of a crackling crust of dry earth, covered with salt efflorence: a considerable portion is marshy, and in the lower parts water accumulates during winter, which is evaporated in the hot weather, leaving lakes of salt on a bed of mud. Again, in certain districts, sand abounds in plains, interspersed with waving hillocks, easily moved by the wind, and sometimes so light and impalpable as to prove not only disagreeable but extremely dangerous to travellers, who not unfrequently are buried in its heaps. Of the rivers of Khorassan, the Tedzen (an. *Ochus*) is

Digitized by Google

next in size to the Oxus: it appears to rise near Seraks, and after receiving the Meshed and other streams, falls into the Caspian Sea in lat. 38° 41′ N. The rivers of the interior are few and inconsiderable, and for the most part are lost in the sand, like the Zenderoon of Ispahan.

The climate of Khorassan varies according to the nature and elevation of the districts into which it is divided. In some parts it is temperate, in others extremely cold. The deserts are infested by the *simoom*, which is as fatal here as in Arabia. The cultivated districts produce the grains and fruits of S. Europe, with asafœtida, tragacanth, and other gums; but timber is rare. Cattle-feeding is the chief employment of the nomad race that roam over the desert; and the camels and goats of Khorassan are celebrated for their fine soft hair, which is a valuable article of trade in the markets of Meshed and Nishapoor, the two largest towns of the province. The inhab. of the settled districts are Tadjiks or Persians, properly so called, and their number has been estimated at 1,200,000. The Ilyats, or nomads, comprise Turkmans, Djelers, and other Turkish tribes, and there are about 30,000 Kurds in the N. part of the province. The religion of all the inhab. is Mohammedan, and most of them belong to the sect of Ali. The province is divided into several governments; but the authority of the king of Persia extends only over the city of Meshed, Nishapoor, Turskish, and Tabas, with their dependencies. The S. parts belong to the Affghans, and the Uzbek Tartars and Turkmans wander over the N. and E., acknowledging only their own native khans. These wild tribes carry on incessant hostilities, invading each other's territories with bodies of irregular horse, who, after ravaging the country and burning the villages, carry off the inhabitants into slavery.

KHOTAN, or ILLITSI, a town of Chinese Turkestan, prov. Yarkund, on the high road between that city and Lassa, 260 m. ESE. the former: lat. 37° 10′ N., long. about 78° E. It is principally occupied by Uzbeks, and is said to be celebrated for 'its musk, and the beauty of its inhabs.' Khotan, according to Abulfeda and other Mohammedan geographers, was formerly a town of great consequence: it is still a place of considerable size, enclosed by ramparts of earth, and, though ill built, has broad streets. It is the station of a Chinese governor and garrison: has manufactures of silk fabrics, leather, and paper, and a brisk trade in these and various other articles, including *yu*, the jasper of the ancients.

KIACHTA, or KIAKHTA, a town of Asiatic Russia, gov. and prov. Irkutsk, being the centre of the trade and political intercourse between the Russian and Chinese empires. It stands immediately within the Siberian frontier, on a rivulet of the same name, a tributary of the Selenga, and upon a plateau elevated about 2,220 ft. above the sea, 55 m. S. by E. Selengiusk, and 180 m. SE. Irkutsk. Pop. estim. at 5,000. Kiachta is divided into an upper and lower town: the former, or the fortress of *Troiskoi Sawsk*, was founded when the first commercial treaty took place between Russia and China, in 1728. The town within is regularly laid out, in the form of a square; in the centre of which is the bazaar, or market place, a wooden building. Except a chapel of stone, and some of the public offices, built partly with brick, Kiachta is constructed wholly of wood. The church, government-house, barracks, and watch tower are the chief public edifices within the town: the various courts and government offices, imperial rhubarb depôt, and custom-house are in one of the suburbs. The lower town, a few versts distant, consists of only about 50 houses, inhabited by merchants, who conduct the trade with the Chinese, and some of whom are said to be very rich. The circulation of gold is entirely prohibited at Kiachta, and no person can pass the gates without being searched. (Travels in the Regions of the Upper and Lower Amoor, by T. W. Atkinson, London, 1860.)

On the Chinese side of the boundary is the Mongolian village of *Mia-mia-tchin* (the place of trade), which, like the Russian town, is laid out in a square form, and surrounded by a palisade. It is ill built, and has only from 1,200 to 1,500 inhab., all males, no women being allowed to reside in it. All the mercantile transactions are conducted between this village and Lower Kiachta, and the merchants of the two places visit each other without let or hindrance. The goods bought by the Russians are immediately sent to Upper Kiachta, to be examined by the custom-house authorities. The Russians exchange furs, sheep and lamb skins, Russian and Silesian broad-cloths, Russian and morocco leather, coarse linens, cattle, and especially bullion, for tea, raw and manufactured silks, nankeens, porcelain, sugar candy, rhubarb, tobacco, and musk. At the Kiachta Dec. fair, the tea bought by the Russians is, at an average, said to amount to 60,000 chests, or 4,200,000 lbs., of fine Pekoe; besides a large quantity of an inferior kind, much of which is consumed by the Siberians and nomadic Tartars. Goods may be conveyed from Kiachta to European Russia either by land or water (by the Lake of Baikal, the Angará and Yeneisei); in the former mode the journey occupies a year, and in the latter three short summers, the rivers being for a great part of the year frozen over.

KIDDERMINSTER, an important manufacturing and market town, parl. bor. and par. of England, co. Worcester, hund. Halfshire, on the Stour, an affluent of the Severn, 13 m. N. Worcester, 16 m. WSW. Birmingham, 118 m. NW. London by road, and 134¾ m. by West Midland railway. Pop. of bor. 15,399, and of par. 20,870 in 1861. Area of par., 11,160 acres. The town, divided by the river into two unequal parts, is irregularly built, but has several good streets, and is well paved, lighted with gas, and kept clean by an underground sewerage. In the centre of the market place is the town-hall, a capacious brick structure, comprising, besides several other rooms, a large council-chamber for corporation meetings and quarter sessions. The church, which stands in a fine open space, on the brow of a hill, and close to the river, is a large Gothic edifice, richly adorned, and surmounted by a lofty pinnacled tower, the whole being in excellent repair. The interior has accommodation for 2,000 persons, and contains several fine old monuments. Connected with the church, at its E. end, is a Gothic chapel or chantry, now appropriated to the use of the grammar-school. On the E. side of the town is the fine district church of St. George, erected in 1823, at an expense of 18,131*l.*; the altar-piece is embellished with a representation of the descent from the cross, in carpet-work, executed with much taste and brilliancy of colouring. There are also places of worship for Independents, Baptists, Wesleyan Methodists, and Unitarians. The grammar-school, chartered by Charles I., has estates attached to it worth about 500*l.* a year; but though all the inhab. are entitled to send their sons here to be educated, free of expense, it is of little practical utility, and is attended only by a few boys. A free school, founded in 1795, provides instruction for about 25 boys, chiefly dissenters. There are numerous Sunday schools,

Digitized by Google

attended by about 3,000 children; and 3 national schools and 3 Lancastrian schools furnish instruction to above 1,100 children. The charitable institutions comprise several almshouses and a dispensary, with some clothing and benefit societies. Near the town is a chalybeate spring, the road to which is an agreeable and fashionable promenade, and in the suburbs are some elegant villas, inhabited by the wealthy manufacturers.

Kidderminster has been noted for its weaving industry since the time of Henry VIII., in whose reign it had a considerable trade in broad cloth. Linsey-woolseys were afterwards introduced, and were superseded, in their turn, by poplins, bombazeens, and carpets. The fabrics now made are carpets, finger-rugs, bombazeens, coverings for buttons, and waistcoat-pieces. The carpet manufacture, introduced in 1735, has long been the staple business of the town. The carpet fabrics comprise Brussels or *pile* carpets, Kidderminster or *in-grain* carpets, and Venetian carpets.

Kidderminster is a bor. by prescription, and received its charter of incorporation in 12 Charles I. Since the Mun. Reform Act it has been divided into three wards, the government being vested in a recorder, 6 aldermen, and 18 councillors. Quarter and petty sessions are held in the town-hall. It is also the seat of a county court. Corp. revenues, 5,156*l.* in 1862. In the reign of Edward I., Kidderminster sent 2 mems. to the H. of C., but the privilege being either lost or disused, it ceased to be represented, and the town had no voice in the legislature till the Reform Act conferred on it the privilege of sending 1 mem. to the H. of C. The electoral limits comprise the old mun. bor. and a small portion of the 'foreign' district. It had 614 reg. electors in 1865. Markets on Thursday: fairs, Holy Thursday, June 20, Sept. 4, and Nov. 26, for horses, cattle, linen and woollen cloth.

KIDWELLY, or CIDWELL, a mun. bor., market-town, and par. of S. Wales, co. Caermarthen, and hund. of its own name, on the Gwendraeth-Vechan, 9 m. S. Caermarthen, 179 m. W. London by road, and 234¼ by Great Western railway. Pop. of par. 1,652 in 1861. Kidwelly is divided by the river into 2 townships, Old Kidwelly being on the W., and New Kidwelly on the E. or left bank. The former was once surrounded by walls with 3 gates, one of which is yet standing; but the houses have fallen to decay, and consist at present of little more than hovels. New Kidwelly, which is joined to the other by a stone bridge, has several respectable houses and numerous cottages. On a rocky eminence overlooking the old town stands the castle, said to have been built soon after the Norman Conquest, and now a large and imposing ruin in tolerable preservation, with many of its apartments and staircases still entire. The W. gateway is a noble specimen of architecture, and some of the towers at the angles retain their arched roofs of stone. The battlements command magnificent views of Caermarthen Bay and the country on both sides the Towy. The church, which is in the new town, is an old cruciform structure, with a tower and spire 170 ft. high: the transepts are now in ruins, and the centre aisle is the only part used for service. The ruins of a priory of black monks adjoin the church. The living is a vicarage in the gift of the crown, and connected with it is a rural deanery in the diocese of St. David's. There are places of worship also for Calvinist and Wesleyan Methodists, Presbyterians and other dissenters. A free-school is supported by funds in the hands of the corporation, and one other school is maintained by subscription. The industry of Kidwelly is chiefly employed in working coal, smelting iron, and making tin plates. It is not a place of much trade, however, owing to the choking up of the river, which is almost useless. There is canal communication with Pembrey, where there is a commodious quay; and a canal and tram-road connect it also with Llanelly, which has a flourishing and increasing trade. Kidwelly forms a part of the duchy of Lancaster, but is governed by its own mayor and 12 aldermen, whose privileges were not affected by the Mun. Reform Act. Markets on Friday: cattle fairs, May 24, July 22, and Oct. 29.

KIEF, a government of Russia in Europe, lying lengthwise along the right bank of the Dniepr, having N. the government of Minsk, W. Volhynia and Podolia, and S. Kherson. Area 19,184 sq. m.; pop. 1,944,334 in 1858. Principal rivers, Dniepr, by which it is bounded all along the E., Pripet, which traverses its N. division, Teteriff, and other affluents of the Dniepr. Surface flat; soil very fertile, so much so that, though agriculture is very indifferent, the return to most sorts of grain is said to be as 6 to 1. Cattle numerous, large, and of a fine breed. Horses small. Forests extensive. In its N. parts there are considerable marshes. Manufactures, exclusive of those carried on in the houses of the peasantry, can hardly be said to exist. Commerce trifling, and mostly in the hands of the Jews. Principal town Kief.

KIEF, the cap. of the above government, and the former residence of the grand dukes of Russia, on the Dniepr, a little below the confluence of the Desna with that river, 273 m. N. Odessa. Pop. 60,682 in 1858. Kief is a very ancient city. It was the earliest seat of the Christian religion in Russia, and was for a considerable period the cap. of the empire. But it subsequently underwent many vicissitudes, being sometimes subject to the Lithuanians, and sometimes to the Tartars, and the Poles. In 1686, however, it was finally ceded to Russia, and has ever since continued in her possession. The town consists of three parts —the old town, on an eminence elevated considerably above the river; Pitchersk, or the citadel, more to the S., and on a still higher eminence; and the lower town, or Podolsk, on a plain along the river. The first or old town contains the cathedral of St. Sophia, founded in 1037, and an object of the greatest veneration on the part of the Russians. The citadel is surrounded by a rampart. Within it is the arsenal, erected by Catharine II., a large handsome building, containing an extensive supply of arms. But the principal object of curiosity in the citadel is the famous monastery of Pitchersk, with its cathedral. It derives its name from *pitchora*, a cavern, because in the vaults beneath are preserved the bodies of several Russian saints. The tower or belfry of the cathedral, deemed by the Russians a master-piece of architecture, rises to the height of 304½ ft. The theological academy of Kief, founded in 1661, in the Podolsk, is one of the most celebrated in Russia. In 1833 a university was founded at Kief, intended to replace that of Wilna, suppressed after the Polish revolution. It has about 90 professors and assistants, with 600 pupils, and a library with more than 35,000 vols. The university buildings are at once large and handsome. One of the most remarkable edifices in the lower town is the exchange, a very large building, the great hall of which can accommodate 3,000 persons. The houses are, for the most part, of wood, and the streets narrow and crooked. The town is principally dependent on the pilgrimages to the cathedral and the

Digitized by Google

monastery, and on the academy. In 1798 a fair, formerly held at Dubno, was transferred thither. It takes place from the 10th to the 30th January, and is attended by all the surrounding nobles, as well as by great numbers of merchants and other descriptions of people.

KIEL, a town of the duchy of Holstein, Germany, on the N. shore of the prov. at the bottom of a beautiful bay, and at the terminus of a line of railway from Hamburg. Pop. 17,543 in 1861. Kiel is handsome, well-built, and thriving. The university, founded in 1665, has many distinguished men among its professors: it has a valuable library comprising 70,000 volumes, and is attended at present by about 200 students. There is also an excellent grammar school, with an orphan-house and a workhouse. The church of St. Nicholas is a fine old building; a handsome palace—formerly inhabited, at occasional visits, by the kings of Denmark—stands on a hill adjoining the town.

Kiel has manufactures of hats, starch, tobacco, and refined sugar. The harbour is safe, and has water sufficient for large ships. A good deal of trade and ship-building is carried on. The Holstein canal, forming a navigable communication between the Eyder and the Baltic, unites with the latter 2 m. from the town. There is a great annual fair in January.

KILDA (ST.), or HIRT, a small island belonging to Scotland, the most remote of the Hebrides, or Western Islands, in the Atlantic Ocean, 60 m. W. from Uist. It is about 3 m. in length by 2 m. in breadth, and contains about 4,000 acres, having attached to it a few dependent and inferior islets. Except at the landing place on its S. side, and at a rocky bay on the N., the island is wholly fenced round with lofty inaccessible precipices. The landing place affords, except during southerly winds, good anchorage. St. Kilda is principally occupied by four hills, and though the soil is but thin and poor, it is, owing to the moisture and mildness of the climate, covered with luxuriant verdure, and affords pasture for some hundreds of sheep and a few cows. A small portion of the surface is in tillage, and produces the variety of barley called bere or big, and oats; but owing to the frequent and tremendous storms by which the island is visited, the crops are exceedingly precarious, and are not unfrequently destroyed. The inhabs. consist of about 30 families, of 5 or 6 individuals each, who live together in one poor hamlet. The island being resorted to by a vast number of sea-fowl, the inhabs. are principally engaged in fowling, and are mainly dependent on the eggs, flesh, and feathers of the birds. Fowling is here, as in all similar localities, an extremely perilous occupation, and one requiring great nerve and dexterity. Fishing is, also, a considerable resource. The people are dirty in their habits, destitute of most of the comforts of life, and apparently unhealthy and short-lived. The island belongs to a single proprietor, who lets it to a middleman, by whom it is let to the inhabs. The latter pay their rents in feathers and bere. The pop. has long been nearly stationary.

KILDARE, an inland county of Ireland, prov. Leinster, having N. Meath, E. Dublin and Wicklow, S. Carlow, and W. King's and Queen's Cos. It contains 418,415 statute acres, of which 66,447 are unimproved bog and waste, consisting principally of portions of the bog of Allen (which see). Surface mostly flat or but slightly undulating; and, with the exception of the bog, the soil is mostly clayey and fertile. The famous common, called the *curragh* of Kildare, in the centre of the co., contains about 5,000 acres, and is said to be unmatched for the softness of its turf and the richness of its verdure. Agriculture in this co. has been materially improved in recent years, and better implements, better stock, and improved processes have been generally introduced. There are some very large estates; but property is, notwithstanding, a good deal divided. Farms vary in size from 5 up to 200 and even 500 acres; and have, indeed, been less subdivided in this than in most Irish counties. Minerals and manufactures unimportant. Principal rivers Barrow, Liffey, and Boyne; the last-mentioned river having its principal source in this co. near Carbury. It is also intersected by the Grand Canal, and by its branch leading to Monastereven and Athy. It has no considerable town, Athy being the most populous. Kildare contains 10 baronies and 113 parishes; it returns 2 mems. to the H. of C., both for the co. Registered electors, 3,055 in 1865. In 1861, the co. had 14,596 inhab. houses, 15,874 families, and 90,946 inhabitants; while in 1841, it had 18,556 inhabited houses, 20,338 families, and 114,488 inhabs.

KILIA, a small town of European Russia, in Bessarabia, on the N. bank of the Kilia, an arm of the Danube, about 8 m. from its mouth. It has some trade; but owing to the shallowness of the water over the bar at the mouth of this arm of the river, it is not likely ever to become a place of any importance.

KILKENNY, an inland co. of Ireland, prov. Leinster, having N. Queen's Co.; E. Carlow and Wexford, from which it is separated by the Barrow; S. Waterford, from which it is separated by the Suir; and W. the latter and Tipperary. Area, 506,333 statute acres, of which 96,569 are unimproved mountain and bog. Though in parts hilly, the surface is mostly either flat, or but slightly undulating. Soil of various qualities; but, for the most part, it rests on a limestone bottom, and is light, loamy, and in the valleys particularly fertile. In some districts the dairy husbandry is extensively carried on. Property mostly in very large estates. Farms of various sizes, but generally small. Partnership tenures are not uncommon; and farm houses and cottages are, in general, very inferior. There are extensive beds of coal in this co., and collieries have been wrought at Castlecomer for more than a century; but, owing to the excess of sulphur, the coal is but little used for domestic purposes, and is principally employed in malting and lime-burning. The woollen manufactures formerly established in this co. are nearly extinct, and, except the grinding of corn into meal and flour, and some breweries, distilleries, and tanneries, the manufactures now carried on are quite inconsiderable. Kilkenny is intersected by the Nore, and bounded on the E. by the Barrow, and on the S. by the Suir; so that it has peculiar facilities for the shipping of its produce, which may be conveyed either to Waterford by the Barrow and the Suir, or to Dublin by the Barrow and the Grand Canal. It contains 9 baronies and 127 pars.; and sends 3 mems. to the H. of C., being 2 for the co. and 1 for the bor. of Kilkenny. Registered electors for the co. 5,151 in 1865. In 1861, the co. had 19,884 inhabited houses, 21,111 families, and 110,341 inhabitants; while, in 1841, Kilkenny had 32,147 inhabited houses, 34,805 families, and 202,420 inhabs.

KILKENNY, an inland city and parl. bor. of Ireland, prov. Leinster, cap. of the above co., on the Nore, 72 m. SW. Dublin, and 27 m. N. by W. Waterford, on the South Eastern railway. Pop. 14,174 in 1861, against 23,625 in 1841. The parl. bor. extends over a space of 17,012 imp. acres, and forms a co. of itself; the portion on the E. side the

Digitized by Google

river, called St. Cannice, or Irishtown, being on the estate of the Bishop of Ossory. Kilkenny is well-built, excepting the suburbs, and beautifully situated. The principal streets are parallel to the river, but there are many cross streets. The principal structures are the castle and cathedral. The former, which is of great antiquity, having been built by Strongbow, has been long the property and residence of the Ormonde family. It has in modern times been almost entirely rebuilt, and has been rendered a commodious as well as magnificent residence. The church of St. Cannice, the cathedral of the see of Ossory, is a large venerable pile of Gothic architecture: it has several monuments, and near it is a round or pillar tower 108 ft. high: the bishop's palace and the deanery are also close by. The co. of the city comprises the parishes of St. Mary, St. Patrick, St. John, and St. Cannice. The church of St. Mary is an elegant modern building; that of St. John, which was the chapel of the monastery of the same name, has been restored, so as to preserve the character of its former singular style of architecture, in which the windows are replicated in such close succession, that the intervals are merely mullions, whence it is called the Lantern of Kilkenny. There is a Rom. Catholic chapel in each parish, that of St. Mary's being looked upon as the bishop's cathedral. Chapels are also attached to the Presentation Convent, and to the Dominican and Capuchin friaries. The ruins of the Franciscan and of the Dominican, or Black Abbey, add greatly to the interest of the place.

A public grammar-school, endowed by one of the earls of Ormonde, and elevated to the rank of a royal college by James II., has accommodation for eighty resident pupils: the house, which stands in a retired situation, on the banks of the Nore, was rebuilt, at the public expense, towards the close of last century: the children of the inhab. of Kilkenny are admitted at half price. Here is also a charter-school in which twenty-four boys are instructed in weaving, a seminary for candidates for the R. Catholic priesthood at Birchfield, a large female school, conducted in the best possible manner by the nuns of the Presentation Convent, a parochial school, and a female orphan house. There are about 1,500 pupils in the public, and 1,600 in the private schools. The principal charitable institutions are the infirmary for the co., the fever hospital, and a lunatic asylum, independent of the county district asylum. There are several almshouses, and two loan funds. The charitable society affords relief to sick tradesmen and to their widows: the benevolent society to the bedridden poor. The workhouse for the Kilkenny union, opened in 1842, is an extensive building, having accommodation for 2,000 inmates. A public walk, called the Mall, extends upwards of a mile along the bank of the Nore.

A charter, granted to the city by William earl marshal, was repeatedly confirmed by successive sovereigns. Elizabeth combined the two boroughs into a single corporation. Under the Municipal Reform Act, the corporation consists of a mayor, two aldermen, and eighteen councillors. Previously to the union, Kilkenny and Irishtown sent 4 mems. to the Irish H. of C.; and, since then, they have sent 1 mem. to the imperial H. of C. The right of voting was formerly in the freemen and freeholders of the co. of the city, the freedom of the city being obtained by birth, servitude, or by gift of the corporation. Registered electors, 574 in 1865.

The Ormonde family have exerted themselves at different periods to introduce manufactures into Kilkenny. In this view, Pierce, the third earl, brought over a colony of Flemings skilled in the making of tapestry and carpets, but without success. The first marquis expended large sums in attempts to establish the linen manufacture. That of frieze, after being carried on for a considerable period, was eventually transferred to the neighbouring town of Carrick-on-Suir. Wool-combing was also introduced, and the manufacture of blankets was extensively carried on; but this also has all but entirely failed. Several flour and corn mills have been erected in or near the city, and there are several distilleries, breweries, and tanneries, and a starch manufactory: but the principal dependence of the town is on its retail trade. A great number of pigs are also killed in the city, and it has an extensive butter trade. Within about 1 m. from the city are some marble quarries and a sawing and polishing mill. The marble is extremely beautiful: it has a black ground variegated with madrepore, bivalve shells, and other organic matter; it takes a fine polish, and makes beautiful chimney-pieces and such like articles. Kilkenny coal neither emits flame nor smoke; but its sulphureous exhalations unfit it for domestic purposes. Markets on Wednesdays and Saturdays, in the covered area of the Tholsel or town-house. Fairs on the 28th of March and Corpus Christi day, for cattle and wool, are frequented by purchasers from all parts of the country.

Kilkenny derived its name from a church or cell dedicated to St. Cannice, or Kenny. It appears to have been a place of some importance before the arrival of the English; for Strongbow built a fortress here, which was enlarged and strengthened by William earl marshal, and subsequently by the earls of Ormonde, in whose possession it has continued for centuries. Parliaments were frequently held in this city: and a famous statute, passed in 1371, for regulating the intercourse between the English and the native Irish, is still quoted by the title of the Statute of Kilkenny. In the wars of 1641, the assembly of the confederated Catholics held its meetings here, in a building which is still, on that account, an object of curiosity to strangers. In 1650, it surrendered to Cromwell.

KILLARNEY, a town of Ireland, co. Kerry, celebrated for the fine scenery in its vicinity, 1½ m. from the E. margin of the lake of the same name, 162 m. SW. Dublin, and 44 m. E. by N. Cork, on a branch line of the Great Southern and Western railway. Pop. 5,187 in 1861, against 7,127 in 1841. The town took its rise from iron and copper works in its neighbourhood, now discontinued from want of fuel; but, for a lengthened period, it has been principally indebted for its support and celebrity to the attractions of the surrounding scenery. It has three pretty good streets, with many bad alleys, and close filthy lanes and yards inhabited by vast colonies of beggars. The principal buildings are the par. church, built in 1802; a large heavy Rom. Cath. chapel, a Methodist meeting-house, a national school, a fever hospital with a dispensary, an almshouse for aged females, founded and endowed by Lady Kenmare, a market-house, theatre, court-house, and bridewell. In New Street is a convent for nuns of the order of the Presentation. Attached to their convent is a school, in which the nuns give gratuitous instruction to about 400 girls. General sessions are held four times a year; petty sessions on Tuesdays, and a manor court monthly: a party of the constabulary has a station here. The town has several good inns, which, in the visiting season, are much frequented. The only manufactures carried on in the town, are

Digitized by Google

those of toys and fancy articles, made of the wood of the arbutus, which is here very abundant. It has a considerable trade in corn, groceries, woollens, and coarse linens; and it has some tanneries, two breweries, and a large flour-mill. Markets on Saturdays; fairs on 4th July, 8th Aug., 7th Oct., 11th and 28th Nov., and 28th Dec. The town is built on the estate of the Earl of Kenmare, whose house and grounds lie between it and the lakes.

The lake of Killarney, or Lough Lane, consists properly of three lakes connected by a winding channel, through which vessels pass from the one to the other. It lies at the E. extremity of the extensive range of mountains called Macgillicuddy's Reeks, and has in its immediate vicinity, or rather, indeed, rising from its banks, the highest summits in Ireland. The largest division of the lake, or that portion called the lower lake, occupies an area of about 3,000 acres; its W. shore is formed by the mountains of Tomies and Glenna, respectively, 2,150 and 2,090 ft. above the level of the sea, having their precipitous sides well clothed with forest trees: on the opposite shore is the striking contrast of flat land in a high state of cultivation, ornamented by the fine demesne of Lord Kenmare. There are said to be no fewer than thirty-three islands, many of which are extremely picturesque in the lower lake. One of these islands, Innisfallen, has been admired by every traveller. Arthur Young says that it is the most beautiful spot in the United Kingdom, and perhaps in Europe. It contains about twenty acres, is extremely well wooded, and has every variety of tranquil beauty and sylvan scenery. On the S. shore of this lake is the fine ruin of Muckross Abbey. The lake is, in some parts, very deep. Between Glenna Mountain and Ross Island, the largest in the lake, the soundings give 42 fathoms. The middle lake occupies about 640 acres: it lies immediately under the Fore or Turk Mountain, elevated about 1,900 ft. above the level of the sea. The strait which joins the middle and upper lake is about 3 m. in length, having, in many places, the appearance of a beautiful river. The upper lake contains about 720 acres. It lies in a hollow, formed by some stupendous mountains, among which are Gurran Tual, the highest in Ireland, rising 3,404 ft. above the level of the sea; so that its scenery is in the highest degree magnificent and sublime. 'Here,' says Mr. Wakefield, 'Nature assumes her roughest and most terrific attire to astonish the gazing spectator, who, lost amid wonder and surprise, thinks he treads enchanted ground; and while he scarcely knows to which side he shall direct his attention, can hardly believe that the scenes he sees around him are not the effects of delusion, or the airy phantoms of the brain, called into momentary existence by the creative powers of a fervid imagination. Here rocks piled upon rocks rise to a towering height; there one mountain rears its head in succession above another, and sometimes a gigantic range seems to overhang you, forming a scene that may be more easily conceived than described. Such sublime scenes cannot be beheld but with a mixed sensation of pleasure and awe, and on a contemplative mind they must make a deep and lasting impression.' (Vol. i. p. 66.) In other places, however, especially on the E. shores of the lower and middle lakes, the scenery is of the softest and most agreeable kind, consisting of finely wooded promontories, ornamented with rivers and seats, and verdant islands; and it is in the contrast between these and whatever is most wild and rugged that lies the great charm of Killarney.

The lakes of Killarney receive the Flesk and several other streams, their refluent waters being carried off by the Lane. The latter issues from the NW. extremity of the Lower Lake, and, after pursuing a WNW. course for about 10 m., falls into Castlemaine Harbour, at the bottom of Dingle Bay. It is well stocked with salmon and white trout, and also with pearl oysters, whence pearls have been repeatedly taken. It is said that the Lane might, at a small expense, be made navigable from the sea to the lake.

KILLIECRANKIE, a celebrated pass through the Grampian mountains in Scotland, co. Perth, about 15 m. above Dunkeld. It is about ½ m. in length. The road is cut out of the side of one of the contiguous mountains; and below it, at the foot of a high precipice, in the bottom of the ravine, the river Garry dashes along over rugged rocks, but so shaded with trees as hardly to be seen. At the N. extremity of this pass, the Revolutionary army under Mackay was defeated in 1689, by the troops of James II., under the famous Graham of Claverhouse, viscount Dundee, who fell in the moment of victory.

KILMARNOCK, a manufacturing town, parl. bor., bor. of barony, and par. of Scotland, district of Cunningham, co. Ayr, on level ground on the N. bank of the Irvine, and on the small stream Kilmarnock or Fenwick, a tributary of the former; 20 m. SW. by S. Glasgow, and 12 m. NNE. Ayr, on the Glasgow, Dumfries and Carlisle railway. Pop. 22,619 in 1861. The main street, forming part of the high road between Ayr and Glasgow, is upwards of 1 m. in length, and is regularly built. The houses, generally of freestone (which is found in great abundance in the immediate vicinity), are erected in a handsome substantial style. Kilmarnock has recently been extended greatly towards the S. and E., and in these directions there are many handsome buildings. The older streets are narrow and irregular; but the magistrates having obtained an act for improving the town, about the beginning of the present century, judicious measures were adopted to carry its objects into effect; and Kilmarnock is now, on the whole, one of the neatest and best built manufacturing towns in Scotland.

Among the public buildings are the two parish churches, one of which, the High Church, after the plan of St. Martin's in London, is surmounted by a tower 80 feet in height; the academy; and the town-hall, a neat modern building in the centre of the town, on an arch over the water of Kilmarnock. The merchants' society have built a spacious inn, which, in point of architecture, is a great ornament to the town. There are five bridges over the Kilmarnock within the town, and two over the Irvine between Kilmarnock and Riccarton, all substantial structures. In addition to the two parish churches, one of which is collegiate, there are four free churches, and several chapels belonging to the U. Presbyterian Associate Synod; and the Relief, Cameronians, Independents, and Rom. Catholics have each a chapel.

Kilmarnock is chiefly eminent as a place of trade and manufacture. It seems originally to have been distinguished for its manufacture of woollen bonnets, formerly worn by all the peasantry; and of striped nightcaps. These articles, called 'Kilmarnock' bonnets and caps, are still manufactured to a very considerable extent, as are forage caps for the army. The carpet manufacture was introduced more than a century ago. There are, besides, manufactures of printed shawls and *Delaine* goods, besides large tanneries. Machinery is also produced, and there are a number

Digitized by Google

of inferior manufactures. Coal is abundant in the neighbourhood, and is extensively exported.

The port of Kilmarnock is at Troon, on the Ayrshire coast, with which it is connected by a railroad 9½ m. in length. This was the first public railway constructed in Scotland, the act for its construction having passed in 1808, though it was not finished till 1812.

Kilmarnock was originally a mere appendage of the baronial manor of the Boyds, lords of Kilmarnock, attainted in 1745, who had their seat in the neighbourhood. Its first charter as a free bor. of barony was granted by James VI. in 1591; a second was granted in 1672. The Reform Bill erected Kilmarnock into a parl. bor., conferring on it, along with Renfrew, Port Glasgow, Dumbarton, and Rutherglen, the privilege of sending a member to the H. of C. Constituency 1,550 in 1865. Corp. rev. 545*l.* in 1863–64. Under the Municipal Reform Act it is governed by a provost, 4 bailies, a treasurer, and 12 councillors.

KILRENNY, a royal and parl. bor., sea-port, and par. of Scotland, co. Fife, on the NE. shore of the Frith of Forth, near the mouth of that great estuary, 20 m. NE. Edinburgh, and 9½ m. S. by W. St. Andrews. Pop. 2,145 in 1861. Its burghal privileges embrace Cellardykes, sometimes called Nether Kilrenny, distant ¾ m. SE. Kilrenny is a place of no importance; but Cellardykes engages extensively in the herring and whale fishery, and is a thriving village. Kilrenny, which was created a royal bor. in 1707, unites with Cupar, St. Andrews, and three small adjacent bors., in sending a member to the H. of C. Registered electors 71 in 1865. Municipal revenue, 62*l.* in 1863–64.

KILRUSH, a sea-port town of Ireland, SW. part of the co. Clare, on the innermost extremity of a creek on the N. side of the estuary of the Shannon, 37 m. W. Limerick, and 20 m. E. by N. from Loophead, at the mouth of the Shannon. Pop. 4,565 in 1861, against 5,070 in 1841. It exports considerable quantities of corn, meal, and flour: the herring fishery is also carried on to some extent; and it has a pier and a patent slip for the repair of vessels. It is a creek belonging to the port of Limerick. Its chief buildings are the par. church, R. Catholic chapel, Methodist meeting-house, market-house, custom-house, court-house, and bridewell. It has a school on the foundation of Erasmus Smith, and some other schools. A manor-court is held monthly: general sessions at Easter and Michaelmas, and petty sessions on Tuesdays. It is a coast-guard and constabulary station. Markets on Saturdays: fairs, May 10 and Oct. 12.

KILSYTH, a bor. of barony, market and manufacturing town of Scotland, co. Stirling, in a valley 10½ m. N. by E. Glasgow, and 16 m. SW. by S. Stirling, on the railway from Glasgow to Stirling. Pop. 4,692 in 1861. The town is irregularly built. The only public buildings are the parish church, with a lofty spire, and a chapel belonging to the Relief. The inhabs. are chiefly employed as cotton-weavers in connection with the manufacturers of Glasgow. The Forth and Clyde canal passes within ½ m. to the S., and contributes greatly to the prosperity of the district.

Of the *præsidia*, or forts, erected by Agricola in his fourth campaign, several mouldering remains may yet be traced. (Taciti Agricola, cap. 23.) They were generally about 2 m. apart, and built nearly in the direction afterwards occupied by the wall of Antoninus. This wall, or *Graham's Dyke*, as it is vulgarly termed, built by the Emperor Antoninus Pius, about the year 140, as a protection against the Caledonians on the N., ran across the isthmus between the Forth and Clyde, and passed within five furlongs of Kilsyth on the S.

Kilsyth gives its name to a great victory gained in its vicinity (15th Aug. 1645), by the Marquis of Montrose over the Covenanters, commanded by General Baillie. Sir James Livingston (a branch of the noble house of Linlithgow) was created Viscount Kilsyth (1661), on account of his loyalty during the civil wars; but the title was attainted, and the estates forfeited in the person of the third viscount, who joined the rebellion in 1715. 'Religious revivals,' as certain fanatical displays got up in various places throughout Scotland, in 1839, have been termed, originated at Kilsyth.

KILWINNING, a market and manufacturing town and bor. of barony, Scotland, in the district of Cunningham, co. Ayr, on a rising ground on the right bank of the Garnock, 3 m. NNW. Irvine, and 21 m. SW. Glasgow, on the railway from Glasgow to Irvine. Pop. 3,921 in 1861. The town consists chiefly of one street, but there are various narrow lanes. The modern additions to the town are substantial and elegant. The only public buildings are the parish church and several dissenting chapels. Eglinton Castle, famous for the tournament held there in 1839, is in the immediate vicinity. The inhabs. are chiefly employed in the weaving of cottons and gauzes, for the Paisley and Glasgow manufacturers. Lime and coal abound in the district around.

Kilwinning is celebrated for its abbey, founded by Hugh de Moreville, constable of Scotland, in 1140, and dedicated to St. Winning. It was, at the Reformation, one of the richest in the kingdom. It is said that the foreign architect who built the abbey was the first to introduce the craft of Freemasonry into Scotland. The lodge of Kilwinning, as the mother lodge of the kingdom, was in the habit of granting charters to other lodges, all of which append the word Kilwinning to their name; but the institution of the Grand Lodge of Scotland at Edinburgh has nearly superseded the dignity of Kilwinning as a mother lodge. Kilwinning is the seat of a body of archers, which existed at least as early as 1488, and is still in a flourishing condition.

KINCARDINESHIRE, or THE MEARNS, a marit. co. of Scotland, having N. the county of Aberdeen, from which it is for the most part separated by the Dee and Avon, E. the German Ocean, by which it is bordered for above 30 m., and S. and W. Forfar. It is of a triangular shape. Area, 394 sq. m., or 252,250 acres, of which 1,280 are water. The Grampian mountains occupy the western, central, and most of the northern parts of the county, extending from Battock-hill, 2,611 ft. high, on its W. confines, to Stonehaven on the E. coast. The arable land consists principally of the district denominated the *How of the Mearns*, being a portion of Strathmore, or a continuation of the *How of Angus*, extending from Strathcathro and Marykirk to within a few miles of Stonehaven. It comprises about 50,000 acres of comparatively low, fertile, and well cultivated land, with many thriving plantations. On the E., the *How* is divided by a range of low hills which separate it from what is called the *Coast* district, containing about 68,000 acres, about a half of which is in a high state of cultivation. There is also a narrow glen or district of arable land along the Dee. Property in a few hands. Arable farms of all sizes, many small, some from 400 to 500 acres, and the proportion of small farms decreasing. Hill pastures let in immense tracts. Improvements began in this county about the middle of the last century, and have been carried on since the close of the American war, and especially during

Digitized by Google

the last thirty years, with great spirit and extraordinary success. Commodious farm-houses have been erected, and new and level roads constructed in districts where formerly there were only wretched footpaths. Lime is the only mineral of any importance. The manufacture of the jointed and painted wooden snuff-boxes originated at Laurencekirk, in this co., about 1790; but Cumnock and Mauchline, in Ayrshire, have become the principal seats of the manufacture. Principal rivers, Dee, N. Esk, Bervie, and Dye, on some of which are considerable salmon fisheries. It contains 19 parishes, and one roy. bor., Inverbervie, which is quite inconsiderable. It sends 1 mem. to the H. of C. for the county, and Inverbervie joins with Montrose, Arbroath and other bors., in returning a mem. Registered electors for county, 987 in 1865. In 1861, the co. had 6,697 inhabited houses, and 34,466 inhabitants, while, in 1841, there were 7,304 inhab. houses, and 33,075 individuals. The old valued rent was 6,243*l.*, and the new valuation 197.133*l.* for 1864-65.

KINCARDINE, a sea-port town of Scotland, in a detached part of the co. Perth, par. of Tulliallan, on the N. side of the Frith of Forth, 21 m. WNW. Edinburgh, on the Scottish Central railway. Pop. 2,166 in 1861. The streets are mostly narrow, irregular, and dirty; but the houses are good, especially those in the newest parts of the town. It has a good quay and harbour, and a good roadstead, affording convenient anchorage for vessels of large burden. Ship-building is carried on to a considerable extent, and the town has an extensive coasting trade. The different parties in the town to whom vessels belong have formed themselves into a Kincardine Mutual Assurance Company, the value of the property so insured being estimated at about 80,000*l.* A regular ferry is established with the opposite side of the river.

KINGHORN, a royal and parl. bor., sea-port, and par. of Scotland, co. Fife, on an eminence, overhanging a small bay, on the N. banks of the Frith of Forth, 9 m. N. by E. Edinburgh, and 3 m. SW. Kirkcaldy, on the Edinburgh-Perth railway. Pop. 1,426 in 1861. The town was not long since one of the most irregularly built in Scotland; but it has of late undergone many improvements in this respect, and most of the older houses (which had two flats or stories, with outside stairs facing the street) have been superseded by more modern and better buildings. The only public edifices are the par. church, a dissenting chapel, a town-hall, gaol, and a handsome schoolhouse erected by subscription. Fifty poor children are educated gratuitously on the bequest of the late Mr. Philip of Kirkcaldy, and are clothed and provided with books and other school utensils. The chief branch of industry is flax-spinning, and weaving of different linen fabrics. A few persons engage in fishing. The harbour is bad, and has scarcely any shipping. Pettycur, about a mile W., is a better harbour; but its chief business derived from its being one of the seats of the ferry across the Frith of Forth, is now all but wholly superseded.

Kinghorn lays claim to great antiquity; it is certain that it was created a royal bor. as early as the 13th century. It was originally a royal residence, but lost that dignity on the death of Alex. III., who was killed (1285) by falling over a rugged and lofty eminence about a mile W. of the town. Kinghorn unites with Burntisland, Dysart, and Kirkcaldy in sending 1 mem. to the H. of C. Registered voters, 61 in 1865.

KING'S COUNTY, an inland co. of Ireland, prov. Leinster, having N. Westmeath, E. Kildare, S. Tipperary and Queen's County, and W. Roscommon, Galway, and Tipperary. Area 493,019 statute acres. A portion of the bog of Allen covers a very considerable tract in the more northerly parts of this co., while on the S. it is partially encumbered with ramifications of the Devils' Bit and Sliebhbloom mountains. On the whole, the unimproved bog and mountain occupy 133,349 acres, of which, however, the far greater portion belongs to the bog. Soil of an average degree of fertility. Estates mostly very large. Tillage farms small, but some of those devoted to grazing are very extensive. Subtenancy is less common here than in most parts of Ireland; but its rural economy is, notwithstanding, but little different from that of the surrounding cos. Silver has been found at Edenderry, but, except limestone, it has no minerals of any real importance; manufactures can hardly be said to exist. Its chief town is Birt or Parsonstown. It is bounded on the W. by the Shannon, and on the S. by the Little Brosna, while it is intersected by the Greater Brosna and the Grand Canal. It is divided into 11 baronies and 52 pars., and returns 2 mems. to the H. of C., both for the co. Registered electors, 3,380 in 1865. In 1861 the co. had 16,365 inhab. houses, 17,879 families, and 90,043 inhabitants, while in 1841 King's County had 24,534 inhab. houses, 26,683 families, and 146,857 inhab.

KINGSTON-ON-THAMES, a munic. bor., market town, and par. of England, co. Surrey, loc. cit. in hund. of its own name, but with separate jurisdiction, on the London and South Western railway, 12 m. SW. London. Pop. of bor. 9,790, and of par. 17,792 in 1861. The town extends from N. to S. about a mile along the Thames, crossed here by a stone bridge of 5 arches opened in 1828. Nearly continuous lines of houses, however, diverge from the body of the town along the two principal high roads towards London, to the bottom of Kingston Hill, and on the road to Portsmouth as far as the par. boundary, 1½ m. from the town. On the opposite side of the river is Hampton-wick, which may be considered to constitute a part of Kingston. The town is well paved and lighted with gas. The streets are narrow and irregular; but there is a spacious market-place, in which is the town-hall, erected in the reign of James I., containing some curious pictures and carvings of high antiquity. The Lent assizes for the co., which were formerly held in it, have been for some years transferred to a neighbouring brick edifice built for the purpose; and attached to it is a small gaol, used for the temporary accommodation of prisoners. The church is large but plain, with a low square tower, and appears to have been erected at different periods, commencing with the reign of Richard II.: the living is a vicarage, in the patronage of King's College, Cambridge. There are places of worship for several denominations of Dissenters. It has a grammar school, founded in 1560, furnishing instruction to between 30 and 40 boys; a boys' and girls' national school, supported by subscriptions; an almshouse for 6 aged men and as many women; and a dispensary.

Kingston is not a place of much trade. Considerable business is done in malting, there being a large number of malting-houses in or near the town; and there are also some flax and oil mills; but most of the townspeople are dependent on their retail dealings with the neighbouring gentry. A large and well-attended corn market is held every Saturday; and the fairs are on Thursday, Friday, and Saturday in Whitsun week, Aug. 2, 3, and 4, and Nov. 13, for horses, toys, and pedlery.

Kingston, first incorporated by King John in 1199, and chartered by many subsequent monarchs, has been governed since the passing of the Mu-

Digitized by Google

nicipal Reform Act, by a recorder, 6 aldermen, and 18 councillors, the bor. being divided into 3 wards. Members were sent by it to the H. of C. in the reigns of Edward I. and II.; but the burgesses were relieved from the burden on petition, and the franchise has not since been renewed. Roman coins, urns, and other antiquities, that have been dug up in considerable quantities, prove Kingston to have been inhabited by those early conquerors of Britain. It received its name, *King's-town* (its more ancient appellation being *More-ford*), from its having been the residence of our Saxon monarchs, eight of whom were crowned here, some in the market-place—the supposed throne, a rude *stone*, still preserved as a monument, near the spot—and others in a very ancient chapel once attached to the church, but now destroyed. A general council was held here by Egbert in 838, and attended by the chief prelates and nobility of the realm. The town continued during several centuries to be a place of high consideration, and in royal favour.

KINGSTON, the largest and most commercial city of Jamaica, though not the cap. of the isl.; on its S. coast, on the N. side of a fine harbour, on the verge of an alluvial plain surrounded by an amphitheatre of mountains. Pop. 35,930 in 1861. The city is built on ground gently shelving to the verge of the sea, and was originally comprised in an oblong space, 1 m. in length by ½ m. in breadth, but it has of late years extended considerably beyond these limits. The streets in Lower Kingston are long and straight, crossing each other at right angles; the houses in general are two stories high, with verandahs above and below. There are two churches, an English and a Presbyterian, both handsome structures, especially the former, which is built on an elevated spot overlooking the city. Kingston has several dissenting chapels, two synagogues, a hospital founded in 1776, numerous other charitable institutions, a free school established in 1729, with an endowment of 1,500*l.* a year, a workhouse and house of correction, commercial subscription rooms, an athenæum, a society of agriculture, arts, and sciences, a savings' bank, and a theatre.

The mountain chain forming the boundary of the plain on which Kingston stands, terminates to the E. in a narrow ridge, whence a long narrow tongue of land extends to Port Royal, forming the S. boundary of the Kingston harbour, a land-locked basin, in which ships of the largest burden may anchor in perfect security. It is strongly fortified. Its entrance, between Port Royal on the E., at the extremity of the tongue of land already noticed, and the opposite coast, is defended by Fort Charles, near Port Royal, on the one hand, and by the Apostles' Battery, Fort Anderson, and Fort Augustus, on the other. The depth of water in the centre of the channel leading to the harbour is, where shallowest, 4 fathoms, and in the harbour itself it varies from 6 to 10 fathoms. About 2 m. N. of Kingston is Up-Park Camp, the only government barracks in the island, consisting of two long and parallel lines of buildings, two stories high, occupying, together with the parade ground, between 200 and 300 acres. Not far from this station is the 'Admiral's Pen,' the former residence of the naval commander-in-chief, but which has been abandoned for several years. Stoney-hill garrison is about 7 m. N. Kingston, at an elevation of about 2000 ft. above the sea.

Kingston engrosses by far the largest portion of the trade of the island. The total shipping of Jamaica, in 1862, consisted of 506 vessels, of 112,642 tons, which entered, and 523 vessels, of 117,474 tons, which cleared. Of these there entered at Kingston, 313 vessels, of 69,006 tons, and there cleared 234 vessels, of 45,058 tons. The staple article of export is sugar.

The corporation of Kingston consists of a mayor, 12 aldermen, and 12 common-councilmen. The town was founded in 1693, in consequence of the destruction of Port Royal by an earthquake; but it was not incorporated till 1802.

KINGSTON, a town of Upper Canada, British North America, Midland dist., on the site of Fort Frontenac, at the NE. extremity of Lake Ontario, and at the mouth of the Cataraqui, 150 m. ENE. Toronto. Pop. 12,100 in 1861. The town covers a large surface, has many stone buildings, with a good harbour, and is the entrepôt of the trade between Upper and Lower Canada. Since the completion of the internal canals, its carrying trade has much declined.

KINROSS, a small inland co. of Scotland, on the W. confines of Fife, being entirely surrounded by the latter co. and that of Perth. Area, 77 sq. m., or 49,531 acres, of which 4,480 are water, consisting principally of Lochleven. Surface varied: in the lower district, to the N. and W. of the lake, the soil is clayey, sandy, and moderately fertile; but in the upper districts it is mostly moorish, mossy, and unproductive. Agriculture a good deal improved; but it labours under great disadvantages from the backwardness of the climate. Property much subdivided, being mostly occupied by resident proprietors holding of the estate of Kinross under payment of a feu or quit rent. The manufactures are of little importance; and though it has limestone and freestone quarries, it has no coal. Kinross and Milnathort are the only towns. It is divided into seven parishes, and is united with Clackmannan and certain parishes in the SW. part of Perth in returning a mem. to the H. of C. Registered electors in this co. 485 in 1865. In 1861 the co. had 1,664 inhab. houses, and 7,977 inhabitants, while in 1841 Kinross had 1,812 inhab. houses, and 8,763 inhab. The old valued rent was 1,674*l.*, and the new valuation, 58,069*l.* in 1864–65.

KINROSS, a market town of Scotland, co. Kinross, of which it is the cap., in an open vale on the W. shore of Lochleven, and on the high road between Edinburgh and Perth, 21 m. NW. by N. Edinburgh, and 13½ m. S. by E. Perth. Pop. 2,083 in 1861. The town formerly consisted of a series of narrow tortuous lanes, but the main street, along the public road, of comparatively recent erection, is wide and substantially built, though not entirely straight. The other portions of the town are irregular, narrow, and of an inferior description. The public buildings are the par. church, built in 1832, in the Gothic style, the co. hall, which also contains the public gaol, erected in 1826; a Free church; and several places of worship in connection with the Associate Synod. On the margin of the lake, in the immediate vicinity of the town, is Kinross House, built on the site of an ancient castle, long the residence of the earls of Morton, by Sir William Bruce, architect to Charles II., and now the seat of the feudal superior of the burgh (Sir Graham Montgomery). This mansion was originally intended for the residence of the Duke of York, afterwards James VII. of Scotland, in the event of his being prevented by the Exclusion Bill from succeeding to his brother.

Kinross was famous of old for its cutlery, afterwards for the manufacture of Silesia linen; but both these have ceased. Cotton weaving, in connection with Glasgow, and more recently the manufacture of tartan shawls, plaiding, and such like articles, are now the principal employments. Damask weaving, for the Dunfermline manufacturers, has also been introduced. There are four

Digitized by Google

annual fairs, chiefly for cattle, held at Kinross; and it has branches of the B. Linen Company and of the Edin. and Glasgow banks.

Lochleven, on the banks of which the town is built, has of late been subjected to a considerable drainage. Its circuit is 12 m., being three less than formerly; and its mean depth has been reduced from 18½ to 14 ft. Its fishery, which opens on 1st Jan., and closes on 1st Sept., yields a yearly rent of about 200*l*. Notwithstanding its diminished size, Lochleven is still a very fine sheet of water. It contains three islands, of which two are important; St. Serf's, on the E., on which are the ruins of a priory belonging to the canons regular of St. Augustine; and the Castle Isle, on the W., so named from its castle, once a royal residence, and in which, as every body knows, Queen Mary was confined from 16th June, 1567, to 2nd May, 1568. During her imprisonment here she was forced to sign an instrument resigning the crown to her infant son. The battle of Langside, which decided her fate in Scotland, took place on the 13th May, only eleven days after her escape from Lochleven. Andrew Wintsun, author of the *Cronykil of Scotland*, was prior of the monastery of St. Serf. Michael Bruce, the poet, who died in 1767, in the 21st year of his age, was born in Kinneswood, on the NE. shore of Lochleven, and received the principal part of his education in Kinross.

KINSALE, a parl. bor. and sea-port town of Ireland, co. Cork, on the E. side of the Bandon, a little way above its mouth in St. George's Channel, 14 m. S. Cork, with which it is connected by railway, and 7 m. N. from the lighthouse on the Old Head of Kinsale. Pop. 4,003 in 1861, against 6,918 in 1841. The town is mostly built along the water's edge, but extends in parts up a steep hill, so that many of its streets are of inconvenient access; they are generally also narrow and dirty; the houses have for the most part an antiquated appearance, and some of them are built in the Spanish fashion. The harbour is excellent. There are 12 ft. water over the bar at the river's mouth at low ebb; and at the anchorage within the bar, off Cove, there are 4 or 5 fathoms water within half a cable's length of the shore, and large vessels may lie close to the town. It was formerly strongly fortified; Fort Charles, on the E. side the river, is now converted into a barrack. It has an ancient par. church, a modern and handsome R. Catholic chapel, another R. Catholic chapel attached to a convent, and two Methodist meeting-houses; with a suite of assembly-rooms, a town-hall, prison, fever hospital, and dispensary. Exclusive of Fort Charles, there is another extensive barrack adjoining the town. Here is an endowed school, founded in 1767; it has also charity schools for R. Catholics and Protestants, and Sunday-schools. The former corporation was dissolved under the Municipal Corporation Act, and its revenues, which were but of trifling amount, made over to the 'town's commissioners.' Previously to the union, Kinsale returned 2 mems. to the Irish H. of C.; and it has since returned 1 m. to the Imperial H. of C., who, down to the passing of the Reform Act, was elected by the sovereign, burgesses, and freemen. The village of Scilly, contiguous to the town, is comprised within the limits of the present parl. bor., which includes a space of 290 acres, and had 144 registered electors in 1865.

Notwithstanding the excellence of its port and its fine river, which is navigable for a considerable way above the town, the trade of Kinsale is but trifling. It is, consequently, in rather a depressed condition. The principal dependence of the town is on its fisheries, which supply Cork and the surrounding country. Every kind of fish is taken, and the sales of fresh fish average 500*l*. per week. The fishermen are esteemed the most skilful of any in Ireland; and, being well acquainted with the coasts, they are good pilots, which obtained for them an exception from impressment during the French war. Oysters of a large size were formerly abundant, but are said to be decreasing, from the want of a judicious and properly enforced code of fishery regulations. The Kinsale fishing district extends from Flathead to the east side of Inchy Bridge, comprising 60 m. of coast.

Kinsale is a place of some note in Irish history. It was taken in 1601 by a Spanish armament, but was retaken during the same year. James II. landed here in March, 1689; but it was taken by the troops of William III., under the Earl, afterwards Duke, of Marlborough, in the following year. It had formerly a royal dockyard; and, during the French war, the harbour was a good deal resorted to by ships of the royal navy.

KINTORE, a royal and parl. bor. and market town of Scotland, co. Aberdeen, on the railway from Aberdeen to Inverness, 11 m. NW. Aberdeen, and 3 m. SE. by S. Inverury. Pop. 568 in 1861. It is a place of no importance. The Aberdeenshire canal passes it on the W. The bor. lays claim to great antiquity; its earliest extant charter is dated 1506, confirming others of older date.

Kintore gives the title of earl to a branch of the ancient family of Keith, descended, in the 17th century, from a younger son of the sixth earl marischal. It unites with Elgin, Banff, Cullen, Inverury, and Peterhead in sending 1 member to the H. of C. Registered voters, 44 in 1865.

KIRBY-MOORSIDE, a market town and par. of England, N. riding co. York, wap. Ryedale, on the Dove, an affluent of the Derwent, 22 m. N. by E. York, and 192 m. N. by W. London. Pop. of par. 2,659 in 1861. Area of par., comprising five townships, 19,920 acres. The town, which is very small, stands on the side of the N. York moors, and is nearly encompassed by steep hills. The par. church, in a romantic situation, is about 1 m. distant. There are places of worship for Calvinistic and Wesleyan Methodists, and for the Society of Friends. The river turns several corn-mills, limestone is dug in the neighbourhood and the malting trade is carried on, the surrounding district being very productive of grain. Its only historical celebrity is owing to the fact that George Villiers, second duke of Buckingham, the favourite of Charles II. (a part of whose estates lay here), retired thither after his disgrace at court, and ended his days, on the 16th of April, 1688, in seclusion and poverty. Pope has described the circumstances attending his death in some of the finest verses in the English language. (Moral Essays, epist. iii. lin. 229.) Markets on Wednesday; cattle and horse fairs, Whit-Wednesday and Sept. 18.

KIRGHIS (STEPPE OF THE), a country of W. Asia in the N. part of Independent Turkestan between the 44th and 55th parallels N. lat., and 53° and 82° E. long.; bounded N. by the Oui, a trib. of the Tobol, and a line of forts connecting Zverenogolovsk, Petropavlowsk, and Omsk; E. by the Irtish and the Chinese stations, extending S. as far as the 42nd parallel; S. by the khanates of Kokan, Bokhara, and Khiva; and W. by the Oural and the Caspian Sea. Length, about 1,400 m.; breadth, 1,100 m.: probable area, 1,533,000 sq. m. Pop. of the three hordes composing the Kirghis nation, 2,300,000. The Kirghis steppe is not, as the word seems to imply, a mere flat and unvaried plain, but is intersected by numerous

Digitized by Google

mountain ridges, and even in its more level parts is covered with round hillocks, causing considerable undulations on the surface. Offsets of the Oural range occupy a large amount of surface in the W. and NW. parts of the steppe. The W. continuations of the Altai range run in very irregular ridges close to the Chinese frontier, and finally connect themselves about the 42d parallel with the W. part of the Muztagh or Thian-chan range. The principal ridges are N. of the 48th deg. of N. lat. The Kara-taou mountains separate the Kirghis steppe southward from the khanate of Khokan. The geological constituents and mineral riches of these mountains are little understood; the central masses appear to consist of granite, gneiss, and serpentine quartz, on which are superimposed silicious and clay-slate, blue limestone, coal strata, with various secondary and other rocks. Lead, copper, and iron, with a small quantity of silver, are found in these mountains, but the present state of the country makes mining wholly impossible.

The waters of the Kirghis steppe comprise, besides the two land-locked seas, the Caspian and the Aral, a considerable number of lakes and rivers. Among the former, most of which are salt, the largest are the Balkat, 115 m. long; the Isik, 90 m. by 30 m., in the SE. angle of the steppe; the Kourdalgiane, Tenis, Tchagli, Oubagan Denghis, and Alksakel-Barbi lakes, with many others of smaller extent. The chief rivers are, 1. the Sir-Daria, rising in the Mus-tagh, about lat. 40° N. and long. 76° E., having a course SW. to Khokan, and thence NW. through the sandy plains of Kisil-koum and Kara-koum into the sea of Aral, its entire length somewhat exceeding 800 m.; and, 2. the Irtish, rising in Chinese Turkestan on the W. side of the great Altai, entering the steppe in the 49th par., forming its E. boundary up to 55° N., and receiving on its W. banks the Ichim, the Tobol, and other tributaries, which intersect with their streams the entire N. half of the steppe. Numerous smaller rivers fall into the different lakes, and many others are almost unknown to Europeans.

The climate is remarkable for its extremes of heat and cold. In the middle and little hordes, that is, in the N. and NW. parts of the steppe, the therm. often falls to 20°, and sometimes 30° below freezing point (Réaum.). The rivers and plains are covered with ice, and the hills with a thick coating of snow; while strong winds from the NE. increase the intensity of the cold, and hurricanes, called *bouranas*, often uproot forest trees, and carry away both man and beast, causing dreadful, and often irremediable, destruction. In summer, on the contrary, the temp. often rises to 36° Réaum. (112° Fahr.) in the shade: the oppressiveness of the heat is much increased also by the sandy nature of the soil, and the paucity of rivers and forests over so vast an extent of country. This great variability of temp., however, and the rapid transition from one extreme to the other, are said not to be so prejudicial to the health either of natives or travellers as might have been expected: agues, indeed, and fevers are common in the marshy districts; but, generally speaking, the people are robust and long-lived. Rain is very rare, even on the mountain sides: dews refresh the soil in some parts, but by far the largest portion of the surface is dried up and rendered useless, by the entire absence of atmospheric moisture. Trees and shrubs are only found on the banks of rivers, and at the foot of the mountains near the Russian frontier, where the soil is the most capable of cultivation: the principal are elms, poplars, willows, wild plum, juniper, and liquorice trees (the latter very abundant, and their produce forming a principal article of trade), wormwood, alkanet, tragacanth, various kinds of euphorbia, anemonies, camomile, asparagus, garlic and onions, horse-radish, wild oats, and rye. Short coarse grass generally covers the plains, on which also the salsola plant grows in great perfection. Agriculture, as a branch of industry, cannot be said to exist. Some land about the rivers is roughly tilled, for the purpose of raising millet, rye, and barley; but the pursuit, except by the Karakalpaks, S. of the Sir-Daria, is generally despised, being only followed by the poorest classes, and then chiefly by women. The wild animals of this region comprise the wolf, wild boar, fox, Cossack dog, wild goat, and hare, all of which roam in great numbers over every part of the steppe: the boar, buffalo, antelope, wild horse, beaver, and water-rat are plentiful in some districts; and there are likewise tigers, lynxes, and other varieties of the cat tribe, in the S. Among the birds may be mentioned the eagle, falcon, cormorant, pelican, stork, heron, goose, and pheasant, with many smaller birds. The lakes and rivers abound with seals, and with several kinds of fish, sturgeon, pike, perch, and carp being the most common. The domestic animals of the Kirghis are the sheep, goat, horse, and camel, the rearing of which constitutes the chief employment of this nomad race. Larger flocks of sheep are nowhere to be found, some of the richer inhabs. possessing upwards of 20,000 head. The animals are strong and large, weighing from 100 to 150 lbs., and they have long coarse wool and enormous tails, sometimes 30 lbs. in weight. They endure with great patience the long privations of food and drink to which they are subject, soon recovering in spring their plump and healthy appearance.

The advantages derived by the people from these animals are immense; their flesh and milk supply them with food, and the wool furnishes felt for covering the tents and other purposes, while at the same time they serve as a standard of value, and form a chief article of export. About 1,000,000 sheep are sent off every year and sold in Russia, Bucharia, and China. Goats, very similar to those of Thibet, are chiefly used as guides in leading the sheep from pasture to pasture, as the latter will not move without them; their flesh is eaten, and the down concealed under their red shaggy hair is a valuable article of trade. The camels (most of which have two humps, the single-humped variety being too delicate for the climate) are here, as elsewhere in Asia, the chief beasts of burden. They are indispensable to the Kirghis, for transporting their women and children, their property and trading stock; nor is it unusual for the rich to possess 300 or even 400 of these animals. Their hair is spun and made into garments, the milk and flesh are used as food, and the skins of the younger animals make warm pelisses. The camels are extremely docile, and carry burdens varying from 14 to 18 *poods* (from 5 to 6 cwt.), travelling during long journeys at the rate of 25 or 35 m. a day. Camel breeding is pursued to a considerable extent in the great (or S.) horde, and great numbers are sent to Persia and India. Horned cattle are very little bred, except in the middle horde; and they were not introduced into the country till about a hundred years ago. Horses are reared in immense numbers, particularly in the N. part of the steppe, where there is a grass called *kovil* admirably suited for horse pasture. A kirghis's wealth is usually reckoned by the number of his horses, and the richest among them have as many as 6,000 or 8,000. They are small but strong, and extremely

Digitized by Google

rapid in their movements; they can travel from 30 to 50 m. without stopping for days together, and, like the other domestic animals, are inured to great privations and long abstinence from food and water. Various expedients are adopted to procure pasturage for the cattle during winter, by making enclosures and raking away the snow; but still they feel most severely the absence of nourishing food, and great numbers, especially of sheep, are lost every year. (Lévchine, La Description des Hordes et des Steppes des Kirghis-Kazaks, p. 406–415.)

The pop. of the Kirghis steppe, however different the origin of the various tribes, has long become amalgamated; and they are now but one people, inhabiting the same kind of country, speaking the same language, professing the same religion, and characterised by nearly uniform habits and customs. The following table of the races and tribes of the three great hordes gives also some insight into the distribution of the population:

Hordes and Races	No. of Tribes	Tents	Individuals
1. Little Horde :—			
Alimonly . . .	6	160,000	900,000
Baionly . . .	12		
Djetir-ourang .	7		
2. Middle Horde :—			
Arghina . . .	17	165,000	960,000
Naimanes. . .	9		
Kiptchak . . .	9		
Orwak-Ghiris .	3		
3. Great Horde :—			
Oulsuin . . .	10	75,000	400,000
Toulatai . . .			
Sargam . . .			
Kodkrat . . .	9		
Total . . .	82	400,000	2,260,000

Hence it appears that the terms 'great' and 'little' are wholly misapplied. The little horde was still greater in the 14th century than at present; the great horde, however, is generally respected, as being the most ancient.

The Kirghis, physically considered, are closely allied to the Mongol Turkmans. Their faces are not so flat and broad as those of the Kalmuks; but their small black eyes, small mouths, prominent cheek-bones, and almost beardless chins, prove their similarity to the Mongols, which has been strengthened also in recent years by frequent marriages with Kalmuk and Mongol women, whom they often bring away by force into their own country. The hair of the men is usually dark brown; but the women have black hair, fresh complexions, and brilliant animated eyes, which, however, are ill-contrasted with lean cheek-bones, coarse skins, and a shapeless slovenly person. Both sexes are strong and healthy, long-lived, and capable of enduring, to an extraordinary extent, both cold and hunger; in fact, if they were not thoroughly inured to every kind of privation, they could not live in this country. The men take the most violent exercise, being often almost wholly on horseback for days together; but in the height of summer, and during the winter, they spend their time in listless indolence, sleeping, drinking *koumis*, their favourite beverage, and listening either to stories or the rude music of their national instruments, a reed pipe and a rude kind of violin. Household labour and tillage are undertaken wholly by the women, who, as in other parts of Asia, are treated almost like slaves. The Kirghis language is a very corrupt dialect of the Turkish, so interlarded with local words that it is almost unintelligible by the Turks of Kazan and Khiva. Few can read, still fewer are able to write, and he that knows enough of Arabic to read the Koran is reckoned a paragon of erudition. Their poetry, however, clearly shows them to be an imaginative people. The dwellings of the Kirghis, who are distinctly pastoral, having no fixed station except in winter, consist of rude tents composed of wooden trellis-work covered with felt, having an opening at top serving at once for window and chimney: their dimensions average about 30 ft. in diam. and 12 ft. in height; the ground (bare earth) is covered with felt or carpeting; the inside is hung with straw mats or red cloth; and the furniture consists only of a few boxes and warlike implements. The food of the people is very simple, consisting almost altogether of the flesh and milk of their flocks and herds. Bread is not known; but *balamik*, or porridge made of millet, rye, or wheat, is in common use. Rice, being an article of import, is very dear, and is used only by the rich. Smoked horse-hams, colts' haunches, and camels' humps are esteemed great delicacies. *Eremetchik*, a rich cheese made from mares' milk, is likewise highly valued; a thinner and inferior kind, called *kroute*, is much used by the lower orders, and constitutes almost the only article of food on those marauding expeditions, which give such zest to the life of a Kirghis. Fish are eaten only by the lowest orders, chiefly by those living on the banks of rivers; and game is little valued. The favourite drinks are the *koumis*, a whey made from mares' milk, and a spirit distilled from koumis, alleged to be both strong and palatable. Arak (made by distilling rice) and tea are luxuries enjoyed only by the wealthy classes. The dress of the people is long and full, and, to European notions, little suited for horse exercise, in which they are chiefly engaged: two or more *tchapanes*, or loose gowns of velvet, silk, or cotton, according to rank; a leathern belt fastening the robe and securing a knife and tobacco bag; and a round cap surmounted by another when abroad, of felt or other warm materials, conically shaped, and with broad flaps. Very full and highly ornamented trowsers are worn, by the men at least, over the gown, which is tucked underneath; and large pointed, high heeled boots complete the costume. The heads of the men are usually kept shaved, with the exception of a forelock; but those of the women are adorned with long plaits running down the back. The female costume, in other respects, differs little from that of the males, except that the robe is close in front, and the bonnets are high, shaped like truncated cones, and surrounded by veils, which serve both for shade and warmth.

The employments of the men consist in an attendance on their flocks and herds, and in hunting antelopes, boars, and wild horses. Very generally, however, they join with the life of a huntsman that of the robber attacking and plundering caravans crossing their steppe, or seeking vengeance for some real or imagined insult from a neighbouring tribe. They are cowards in regular warfare, soon discouraged, and, when unhorsed in close conflict, wholly vanquished. The feuds, or barantas, had become so frequent and extensive in 1812–1820, that the pop. of the hordes, especially the little horde, was much thinned; the trade in cattle was all but destroyed; and thousands of families, unable to support life in their own country, emigrated to the government of Orenburg, and other parts of Russia.

The arms of the warrior Kirghis are the lance, sabre, bow and arrows, a long-handled axe, called

Digitized by Google

tchakane, and a clumsy kind of gun, their defensive armour being a coat of mail, and sometimes a helmet. Among a people so disorderly it is impossible that internal industry should flourish. Weaving is carried on for the supply of family wants, cordage is manufactured from horses' and goats' hair, a coarse soap is made of grease and vegetable ashes, and the skins of sheep and goats are converted into a rude kind of leather. Blacksmiths, and other workers in metal, make the ornaments attached to horse-furniture, belts, sword-blades, and spears; but every article is of the coarsest quality and worst make. The trade now carried on by the people with other nations is much less considerable than it was half a century ago, in consequence of the loss of cattle and horses by the barantas. The Russians and Chinese have large dealings with them, and a brisk trade is also carried on with Khiva, Khokan, and Little Bucharia. The trading posts of the Russians are at Orenburg (the most important of all), Troïtsk, Petropavlowsk, Omsk, Semipalatinsk, and Ouralsk, those of the Chinese being at Tchugutchak (Chin. *Talbazatai*) and Kuldsha (Chin. *Ili*).

The business, usually carried on in summer and autumn, is conducted wholly by barter, the Kirghis furnishing sheep, horses, horned cattle, camels, goats, goats' hair and wool, the skins of horses, sheep, and other animals, wild as well as domestic, and antelopes' horns; in return for which they receive from the Russians iron and copper implements, thimbles, needles, cutlery, padlocks, hatchets, velvets, brocades, silk-stuffs, linens, ribands, looking-glasses, and snuff; from the Chinese, silver, silk goods, porcelain, japanned wares, and tea; and from the Khurians and Bokharians, cotton goods, quilted dresses, rice, swords, fire-arms, and powder. Independently of the trade they carry on at the outposts, considerable traffic takes place with the caravans crossing the steppe between Khiva, Khokan, and the Russian frontier. The Kirghis are usually employed as protectors and guides in the journey over these wilds; great delays often occur owing to the caprice of the guides; and the travellers, if they are not entirely plundered of their property, are in general heavily mulcted by the khans, through whose pastures they are obliged to pass. The chief caravan routes are, 1. from Kalmikof to Khiva, across the Oust-ourt plateau, between the Aral and Caspian Seas; 2. from Orenburg to Bokhara (64 days), over the Mogodjar mountains and across the Karakoum and Kizil-koum deserts; 3. from Petropavlowsk to Bokhara (90 days); and 4. from Semipalatinsk to Khokan (40 days). These roads, however, are so vaguely laid down, and so often varied, that distances cannot be computed with any accuracy.

The government to which these people are subject cannot be properly compared with any form common to civilised countries. Geographers have termed it patriarchal and despotic; but, in fact, there is no system of government, for even where a khan, or sovereign, is chosen, he is usually elected only by a few of the tribes, who obey only so long as they are pleased with their ruler, while the rest refuse all obedience, and probably take arms against him. He may issue orders, but he cannot enforce compliance; and even where there is an absolute infraction of the laws of the Koran, by which they profess to be guided, the delinquent's punishment is more frequently inflicted by private revenge than by the decision of a public judge. The punishments are founded on the *lex talionis*, and consist commonly of the bastinado, maiming, and strangling; but, if the offending party consent, almost all crimes may be atoned for by payments of sheep or horses. The khan must be elected from the highest class, known as the *white kost*, those, in fact, who can lay claim to noble descent: the rest of the people belong to the *black kost*. These are the only remaining distinctions among a people who, a century ago, were, of all others, the nicest in establishing family preeminence.

With respect to religion it is difficult to say whether the Kirghis have any particular form. They acknowledge a supreme creative intelligence; but some worship according to the dogmas of the Koran, and others mingle Islamism with an old kind of idolatry, while a third section of the pop. believe in the existence not only of a good deity, called *Koudaï*, but also of a wicked spirit *Chaitane*, the author of all evil. In the existence of inferior spirits, and in witchcraft and sorcery, the people have universally the most implicit faith; and the hadjis travelling through the steppe reap great pecuniary advantages by imposing on their credulity. The exercises of religion meet with little attention; long and frequent prayers do not suit the Kirghis; they fast too often by compulsion to do so by choice; and they are not so friendly to cleanliness as to relish the ablutions enjoined by the Mohammedan religion. In fact, with the exception of extreme credulity, there is hardly a trace of religious sentiment among them.

The history of the *Kirghis-Kazaks* cannot be traced with much probability beyond the 16th century. Earlier historians, commencing even with Herodotus, say that the steppe was inhab. by a people living in felt tents, and otherwise assimilated to the great Mongolian family; but these were *Nogais*, not Kirghis, being more civilised, and in all probability the builders of those temples and houses the ruins of which are still visible. (See Herod., iv. 24, 46, and Heeren's Researches, Asia, ii. 285–298.) The name of the Kirghis first appears in Russian history about the middle of the 16th century. But Ferdusi, in the 11th century, speaks of Kazaks characterised by the same habits as the Kirghis, though it does not appear that they then lived on the great steppe E. of the Aral. They first became nominally subject to Russia in 1740, but the rule of that country has never been felt but by the tribes adjoining the frontier. As to the native khans, so also to the Russian government, obedience is paid only when it is convenient, a rapid journey into the interior soon carrying them out of reach, when it suits their purpose to plunder rather than trade. It remains to be proved whether the efforts now in progress at Orenburg, to introduce civilisation into the steppe by educating young Kirghis, will accomplish the professed object of making them, instead of a burden and nuisance, useful and obedient subjects of Russia.

KIRKCALDY, a royal and parl. bor., sea-port, and manufacturing town of Scotland, co. Fife, on the N. shore of the Frith of Forth, 10 m. N. Leith, on the Edinburgh-Perth railway. Pop. 10,841 in 1861. The town consists principally of a single street, parallel to the shore, 2 m. in length. Having been originally laid out and built with no attention to any general plan, but according to the taste, convenience, and means of the parties, this street was formerly of the most irregular description, being narrow, crooked, and the houses frequently mean and poor. In 1811, however, an act was obtained for widening, paving, and lighting the streets, and otherwise improving the town; and since that period several new lines of houses have been constructed, and many important im-

Digitized by Google

provements effected. The houses in the main street are now mostly of a very respectable class, and the shops are good, and handsomely fitted up. The town is well supplied with water, paved, and lighted with gas. Among the public buildings are, the par. church, rebuilt in 1807; Abbotshall church, within the parl. bor.; several chapels belonging to the Free Church; various dissenting chapels; and a handsome town-house, including a gaol, with a spire erected in 1828. Besides the parochial schools, and a variety of private seminaries, there are two charity schools for the education of children of both sexes, on an endowment by Mr. Philp, merchant, who bequeathed 70,000*l.* for the foundation and maintenance of these and similar schools in Pathhead and Kinghorn.

The staple manufacture of the town is that of coarse linen, including sheetings, ticks, dowlas, and canvass. There are also rope-walks, bleach-fields, iron foundries, and breweries. The harbour, near the E. end of the town, consists of an inner and outer basin. It is wholly artificial, being formed of three piers, and dries at low water; but notwithstanding this drawback, the town possesses a good deal of shipping, and carries on a pretty extensive trade. There belonged to the port on the 1st Jan. 1864, 26 sailing vessels under 50, and 32 above 50 tons, besides two steamers, one of 35, and the other of 86 tons. There is a good deal of trade with the N. of Europe, whence hemp, flax, timber, and tar are imported, and to which manufactured goods and coal are exported. Gross customs' revenue, 10,764*l.* in 1863. There is a weekly corn market, which is well attended.

Kirkcaldy was made a royal bor. by Charles I. in 1644. It had attained about this period to considerable wealth and distinction; but it subsequently encountered severe losses, and, about the middle of last century, it had only two ferry-boats and one coasting vessel. But since 1763, and especially since the close of the American war, its manufactures, commerce, and population have steadily increased. It is now governed by a provost, two bailies, and eighteen councillors. Corporation revenue 699*l.* in 1863-64. Kirkcaldy unites with Burntisland, Dysart, and Kinghorn, in sending one mem. to the H. of C. Registered electors in the bor. 431 in 1865.

Kirkcaldy is the birth-place of Adam Smith, the author of the 'Wealth of Nations,' born here on the 5th of June, 1723. His father being comptroller of customs at this port, Smith received the rudiments of his education in the parish-school; and he afterwards resided here, with little interruption, from 1766 to 1776, occupied in the elaboration of his great work, which appeared in the last-mentioned year. Raith, the seat of the Ferguson family, is in the immediate vicinity of the town.

KIRKCUDBRIGHT, a marit. co. of Scotland, or, as it is more frequently termed, a stewartry, in the most southerly portion of that kingdom, comprising the E. half of the district known by the name of Galloway. It is bounded on the E., N., and W. by the counties of Dumfries, Ayr, and Wigtown, and on the S. by the Irish Sea and the Solway Frith. Area, 954 sq. m., or 610,734 acres, of which from one-fourth to one-third part are arable. Surface much diversified, but in general hilly, and in extensive districts mountainous. The highest part of the Kell's range has an elevation of 2,652 ft.; and Cairnsmoor of Fleet, on the bay of Wigtown, rises to the height of 2,329 ft. The greater number of the hills are bleak and barren; but in parts, particularly on the confines of Ayrshire, they afford good sheep pasture. The arable lands lie principally to the S. of a line drawn from the middle of the par. of Irongray to Gatehouse; but Criffel, 1,831 ft. high, on the Solway Frith, and some other considerable hills, lie within this tract. Climate in the lower districts mild but moist; in the upper districts it is sometimes severe. Except along the Solway Frith, the soil even of the arable land of the stewartry has seldom a smooth, continuous surface: it is very often broken with gravelly knolls, but the hollows between these consist principally of a gravelly or hazelly loam, and are often extremely productive, and particularly well adapted for turnip husbandry. In wet summers the arable knolls are covered with luxuriant crops, while many of those that do not admit of cultivation yield excellent pasture. Principal crops, barley and oats, but wheat is also raised. Within the last few years the turnip culture has made great progress. Arable husbandry has been greatly improved since the peace: furrow draining is now extensively practised, and latterly bone-dust has been successfully employed in the raising of turnips. But the soil and climate are better suited for grazing than cropping, and the principal attention of the farmer is given to the former. The breed of polled cattle, peculiar to this co. and that of Wigtown, is one of the best in the empire: they are principally sent up by land when half fat to the Norfolk fairs; but they are also, with sheep, sometimes fattened off on turnip and sent by steam to Liverpool. Farm buildings have been vastly improved, and the roads, which were formerly execrable, are now nowise inferior to those of any other co. in the empire. There are some very large estates; but property is, notwithstanding, more subdivided in this than in most other Scotch cos. Farms of medium size, and all let on 19 year leases. This co. and Wigtown are mostly subdivided by the dry stone walls known, from this district, by the name of 'Galloway dykes,' and which, when well built, make an excellent fence. Manufactures and minerals unimportant; lime, coal, and freestone are all imported principally from Whitehaven, on the opposite side of the Solway Frith. The granite used in the construction of the Liverpool docks is mostly obtained from near Creetown, in this co. Principal rivers, Dee, Fleet, and Urr; the salmon fisheries on the first are valuable. Principal town, Kirkcudbright. The co. has twenty-eight parishes, and sends one mem. to the H. of C., for the co., while the bor. of Kirkcudbright joins with Dumfries, Annan, and other bors. in returning a mem. Registered electors for the co. 1,353 in 1865. In 1861, the co. had 7,326 inhab. houses, and 42,495 inhabs.; while, in 1841, it had 8,162 inhab. houses, and 41,119 inhabs. The old valued rent was 9,549*l.*; the new valuation was 279,820*l.* for 1864-65.

KIRKCUDBRIGHT, a royal and parl. bor., and sea-port of Scotland, cap. of the above co., on the Dee, about 6 m. above its confluence with the Solway Frith, 24 m. SW. Dumfries, and 83 SSW. Edinburgh, on a branch line of the Glasgow, Dumfries, and Carlisle railway. Pop. 2,638 in 1861, against 2,692 in 1841. It is a finely situated, well built town. The streets intersect each other at right angles, and the houses are mostly two stories high. A large Gothic church, with a spire, was erected in 1838, at an expense of 6,782*l.*; it has also a gaol erected in 1816; an academy, with a room for the public subscription library; and the ruins of an old castle, once the property of the lords Kirkcudbright. Exclusive of the parish church, the Free Church, United Secession, and Rom. Catholics have places of wor-

Digitized by Google

ship. A school founded and endowed by Mr. W. Johnston, a native of Kirkcudbright, and intended to furnish the children of the poorer classes with a good English education, was opened in 1848. A workhouse for the use of this and the adjoining parishes of Tongland, Twynholm, Borgue, and Kerwick, has been erected at a little distance from the town. The harbour of Kirkcudbright is the best in the S. of Scotland. At low ebb in neap tides there is about 10 ft. water in the river; and as the tide then rises about 18 ft., there is at all times water to float the largest ships. The access to the Dee is much facilitated by the lighthouse erected in 1843, on the little Ross at its mouth. But, despite its fine harbour, Kirkcudbright, owing to the thinness of the population in the vicinity, has very little trade. The harbour revenue amounts to 250*l.* a year. Ship-building is carried on to some extent, but it has no other manufacture worth notice.

Kirkcudbright was made a royal bor. by James II. in 1455. Under the Municipal Reform Act it is governed by a provost, two bailies, and fourteen councillors. It unites with Dumfries, Annan, Sanquhar, and Lochmaben, in sending one mem. to the H. of C. Registered electors, 121 in 1865. Corporation revenue 1,399*l.* in 1863–64. Its pecuniary affairs have been exceedingly well managed, and it has at this moment the whole property contained in the charter of James II. The town's revenues are employed to defray the expenses of the academy, and the charges on account of lighting the town and supplying it with water, for which no assessment is imposed on the inhabitants. The environs of the town are extremely beautiful. The rising grounds on each side the river, from Tongland to the sea, are embellished with plantations. St. Mary's Isle, the residence of the earls of Selkirk, adjoins the town on the S.

KIRKHAM, a manufacturing and market town and par. of England, co. Lancaster, hund. Amounderness, in the low district, called the Fylde, 7 m. W. by N. Preston, 27 m. N. Liverpool, and 220 m. NNW. London, on the London and North Western railway. Pop. of town, 3,380 and of par. 11,445 in 1861. The town, though small, is handsome and well built. The church, a large modern structure, was erected, in 1822, at an expense of 5,000*l.*: its interior, which accommodates nearly 2,000 persons, is ornamented with several fine old monuments, carefully replaced in the new building. The living is a vicarage, in the patrimony of the dean and canons of Christchurch, Oxford, the chapelries in the out-townships being in the gift of the incumbent. Within the town are places of worship for Wesleyan Methodists, Independents, Swedenborgians, and Rom. Catholics, with attached Sunday schools, attended by about 500 children; and connected with the church is a national school for boys and girls. A grammar school, founded in 1670, is attended by 80 or 100 boys: it is managed by a principal and two under-masters; the instruction given is purely classical. A charity school, established in 1760, for clothing and educating 40 girls, is respectably conducted. The Rom. Catholics have also large schools for the children of that religion, which has numerous adherents in and round the town. The industry of Kirkham, 20 years ago, was confined to the manufacture of sail-cloth, cordage, and coarse linens, of materials brought from the Baltic; but now, the cotton manufacture is extensively carried on. The Lancaster Canal, the Lancaster and Preston railway (opened in 1840), and the Preston and Wyre railway, afford conveyance both for passengers and goods. Petty sessions are held once a fortnight, and a court of requests for debts under 40*s.* sits monthly. Markets on Thursday: fairs, Feb. 4 and 5, April 29, and Oct. 18.

KIRKLESI, KIRK-EKLESI, or KIRK-KILISSA (meaning *the Town of Forty Churches*), a town of European Turkey, prov. Roumelia, cap. circ. of its own name, 30 m. E. Adrianople and 106 m. WNW. Constantinople; lat. 41° 50′ N., long. 16° 55′ E. Pop. estimat. at 5,500 families, or 28,000 individuals, about one-half of them Greeks. It is a large, dirty, ruinous town, surrounded with old walls defended by a citadel, and has a bazaar, several mosques and hummums and Greek places of worship. The neighbourhood produces an abundance of grapes, melons, and other fruits; and a good deal of wine is made. The Turkish inhab. are rude, brutal, and ignorant, but the Greeks are a large and thriving community, who have established two good schools on the monitorial system for the instruction of their children, a degree of refinement to be met with in few other towns of Turkey.

KIRKWALL, a royal and parl. bor., market town, and sea-port of Scotland, in Mainland, or Pomona, the largest of the Orkney Islands, of which it is the cap., on the NE. side of the island, at the head of an open bay exposed to the N.; 26 m. N. by E. John O'Groats, and 208 m. N. Edinburgh. Pop. 3,519 in 1861. The town consists chiefly of one narrow and inconvenient street, about 1 m. in length, parallel to the bay. The houses have generally their gables to the street, and most of them bear the marks of antiquity. But new and handsome houses are gradually being erected, both in the town and neighbourhood. Here most of the country gentry reside, at least during winter, and the society of this remote place is esteemed equal, if not superior, to that of any provincial town of its size in Scotland. The only public building of a modern date is the town hall, with piazzas in front, containing a gaol, assembly-rooms, and court-room. The principal building in Kirkwall is the cathedral, erected in the 12th century, and dedicated to Magnus, one of the Scandinavian earls of Orkney, who, having been assassinated in 1110, was canonised after his death. This venerable Gothic structure, which has been enlarged at different times, is, after the cathedral of Glasgow, the most entire in Scotland; it is in the form of a cross, its extreme length being 236 ft., its greatest width 56 ft., the height of the roof 71 ft., and that of the spire 140 ft. But the original spire having been destroyed by lightning in 1671, the present spire is modern, and it is, also, unworthy of the building. About 100 yds. S. from the cathedral are the ruins of two ancient edifices, viz. the Earl's Palace, built by Patrick Stewart, earl of Orkney, and the Bishop's Palace. In the latter, Haco, king of Norway, died on his return to Orkney, after the unsuccessful battle of Largs, in 1263, and James V. occupied it on his visit to the island in 1540. The remains of Kirkwall Castle, on the W., are still visible. The cathedral formed the cemetery of many Scandinavian kings, nobles, and warriors. The par. church, consisting of the choir of the cathedral, is collegiate. There are also chapels belonging respectively to the Associate Synod, Original Seceders, and Independents. The town has numerous and well attended schools, several libraries, a museum, and a printing-press. Malcolm Laing, the historian of Scotland, was born in the vicinity of Kirkwall, and educated at the grammar-school of the bor.; and at his death, in 1818, his remains were interred in St. Magnus' cathedral.

Digitized by Google

Rye straw raised in Orkney having been found to be peculiarly suitable for the manufacture of straw plait for ladies' bonnets, the business is carried on in Kirkwall to a considerable extent, though not so much so as formerly. It has also distilleries, and some weaving is carried on for domestic use. The herring, cod, and lobster fishery is prosecuted to a considerable extent. The town is the seat of the courts of law for the whole of Orkney. Kirkwall has a custom-house, which comprises all the harbours in the Orkneys; its revenues amounted to 981*l.* in 1859; to 138*l.* in 1861; and to 114*l.* in 1863. A steam-boat plies between Leith and Kirkwall, touching at Aberdeen, Wick, and intermediate ports: in summer it goes as far as Lerwick, in Shetland. Kirkwall has an annual fair in the month of August, which lasts about two weeks; and the greater part of all the mercantile business of the Orkney Islands is negotiated at this fair.

Kirkwall was made a royal bor. by James III. in 1486. It unites with Cromarty, Wick, Dingwall, Dornoch, and Tain in sending a member to the H. of C. Registered electors, 157 in 1865.

KIRRIEMUIR, a bor. of barony, market and manufacturing town and par. of Scotland, co. Forfar, in a pleasant situation, partly on a flat and partly on an inclined plain, along the N. brow of a picturesque glen, through which the streamlet Garry runs, 15 m. N. by W. Dundee, and 5 m. NW. Forfar. Pop. 3,275 in 1861. The Grampians are within 3 m. of the town, on the N. The view from its upper part, about 400 ft. above the level of the sea, is most extensive and striking, having the Grampian range on the N., and the whole extent of the splendid valley of Strathmore on the S. The form of the town has some analogy to an anchor. The only public buildings are, the trades' hall, the property of 12 friendly societies of the town and parish; the parish church; and chapels belonging respectively to the Associate Synod, the Relief, the Original Seceders, and the Episcopalians. There are 16 schools in the par., of which 3 are endowed, 1 supported by subscriptions, and 12 unendowed. There are 2 bequests for education, the one educating about 50 boys, the other 20 boys and 50 girls. Dr. M'Crie, the biographer of John Knox, and Dr. Jamieson, the Scotch lexicographer, were once dissenting clergymen in Kirriemuir.

Though inland, and devoid of ready communication with the sea, Kirriemuir has attained to considerable eminence in the manufacture of the coarser kinds of linen fabrics, such as Osnaburgs, sail-cloth, bagging, and imitation Russia sheeting. This branch of business, which is carried on chiefly in connection with the Dundee manufacturers, was introduced soon after the rebellion of 1745.

Kirriemuir is governed by a bailie, nominated by the feudal superior (Lord Douglas). The peace is preserved by a body of constables, chosen annually.

KISHM (the *Oaracta* of an. Greek authors), the largest island in the Persian Gulf, and the chief of a group situated near its mouth, extending between lat. 55° and 56° 30′ N., and long. 26° and 27° E., comprising Ormuz, Kenn, Anjar, Larak, and many smaller islands. Kishm is of an elongated shape, nearly 60 m. in length E. to W., and 12 m. in its greatest breadth. Pop. estimated at 5,000. It is separated from the main land by Clarence Straits, a narrow and intricate channel, navigable, however, for large ships, the soundings varying from 4 to 12 fathoms. A ridge of hills extends from one extremity to the other of the island on its S. side; the rest of the surface is mostly plain. Sandstone is the predominant formation. The surface is generally arid and barren, and is in parts extensively incrusted with saline efflorescence; but a few portions are remarkably productive. The N. part of the island is the most fertile and populous: the soil there consists of a black loam, on which wheat, barley, vegetables, melons, grapes, and dates in large quantities are produced. The island at present yields corn enough for home consumption. Boats from all parts of the gulf come to Kishm for wood. Cattle and poultry are reared: the former are scarce, but goats are bred in considerable numbers, and thrive well. The greatest enemies of the goats are jackals, with which the island is much infested; antelopes of a superior breed, partridges, and rock pigeons abound, and wildfowl in winter. The inhab. are chiefly Arabs; they employ themselves in fishing, agriculture, and the manufacture of cloth, and reside chiefly in villages and hamlets scattered along the coasts. Kishm is said to have once contained upwards of 300 towns and villages, but at present it has not half that number. The chief towns are Kishm at its E., and Basidoh at its W. extremity, and Left on its N. side. Kishm, with about 2,000 inhab., seems to have been formerly of considerable commercial importance. It is surrounded by a high mud wall, flanked with towers, on which a few old guns are mounted. Streets narrow and dirty; houses flat roofed, and some of them large and neatly fitted up. The bazaar is plentifully supplied with many kinds of vegetables and fruits from Persia; and good wines, dried fruits, silk and cotton cloths, and carpets of the richest patterns, may be obtained. The town has a brisk trade and a bustling appearance, many native vessels calling for food and water, or to take pilots for the Kishm channel. It is the residence of the sheikh. A few coasting vessels are built here with timber from the Malabar coast. Basidoh, or Bassadore, once belonged to the Portuguese, and the ruins of their town and fort may still be traced. It is admirably situated in most respects and healthy, but ill supplied with water. Being the principal station in the gulf for ships of the Indian navy, it has several European houses and public buildings, including a hospital, store and guard houses, and is the residence of the commander of the Indian squadron. Its port is difficult to enter, but vessels have good anchorage in 6 or 7 fathoms, ¼ m. from the shore. Left is at present a town of only 600 inhab.: it was bombarded by the English in 1809. Vessels may lie before it in 4½ fathoms water completely landlocked.

The island of Anjar, 3 m. S. of Kishm, is of volcanic origin, 5 or 6 m. in circuit, and uninhabited, though the remains of a town and reservoir be still visible on its N. side. It is covered with pits of salt and metallic ores, and between it and Kishm is an excellent anchorage. Larak, to the SE., is also of volcanic origin, and inhabited only by a few fishermen. The Great and Little Tombs, about 25 m. SW. Kishm, are low and uninhabited. The small islets between Kishm and the main land are verdant and covered with wood, a circumstance rare in the adjacent parts of Persia. Nearchus visited and described this island group; and Arrian affirms that in his time was to be seen in Kishm the sepulchre of its first king Erythras, from whom the gulf was named *Mare Erythræum*. These islands are now governed by a sheikh, tributary to the imâm of Muscat.

KLATTAU, a town of Bohemia, cap. circ. of same name, on the Bradlenka, 70 m. SW. Prague, on the railway from Prague to Ratisbon. Pop. 7,382 in 1857. The town is well built, and has a castle, some handsome churches, a council-house, with a tower 150 ft. in height, containing a bell

Digitized by Google

weighing 90 *centners*, a gymnasium, high school, two hospitals, and manufactures of woollen cloth and stockings. It is said to have been founded in the eighth century.

KNARESBOROUGH, a parl. bor., market town, and par. of England, co. York, W. Riding, wap. Claro, 16½ m. W. by N. York, the same distance N. Leeds, and 182 m. N. by W. London on the Great Northern railway. Pop. of parl. bor. 5,402 in 1861. The town is beautifully situated on a slope, NE. of the Nidd, the stream of which is rapid, deep, and very serviceable for turning the wheels of mills and machinery connected with the linen trade. Two stone bridges cross it, one above and the other below the town; and on a beetling crag, close over the torrent, stands a ruined castle, opposite to which, on the other side the river, is a curious dropping well, the water of which runs from a source 50 ft. above, and trickles through a porous limestone rock with sufficient rapidity to deliver about 20 gallons per minute. At no great distance is an oratory, carved out of the rock, and a mile lower down the stream are the ruins of a priory, founded by Richard, brother of Henry III., and a cavern known as St. Robert's Cave, where Eugene Aram, now so well known through Sir Lytton Bulwer's novel, committed the murder in 1745, of which he was convicted fifteen years after. The streets of Knaresborough are broad, regularly laid out, well paved, and lighted with gas: the houses are almost wholly of stone, and many of them large and handsome. The market-place is extensive, and there is a good market-house. The court-house occupies the centre of the old castle, and another part of it is used as a prison for the liberty of the forest of Knaresborough. The par. church is of considerable antiquity, but little beauty. The Independents, Wesleyan Methodists, and R. Catholics have also places of worship, and the Sunday schools of the church and chapels are attended by upwards of 800 children. A charity school, two national schools, an infant school, a school of industry, and two other schools, furnish instruction to about 600 children, chiefly belonging to the working classes.

The public institutions of the town comprise a public library, dispensary, lying-in charity, savings' bank, and Bible society.

The industry of Knaresborough is chiefly confined to linen-weaving. The trade has been long established, and a large amount of capital is vested in mills, warehouses, and machinery. Knaresborough has a great corn market, and from this place and Ripon the manufacturing districts of the W. Riding are principally supplied.

Knaresborough is a bor. by prescription, governed by a bailiff. Amount assessed to property tax, 12,694*l.* in 1862. The parl. franchise was granted in 1 Mary (1553), since which the bor. has sent two mems. to the H. of C. The right of voting, till 1832, was vested in the owners of 84 burgage tenures, all of which, excepting four, being the property of the duke of Devonshire, the members were his nominees. The Boundary Act enlarged the limits of the bor. by including in it parts of the townships of Scriven and Knaresborough. Registered electors, 271 in 1865. Markets on Wed., and on alternate Weds. for cattle. Sheep fairs, Wed. and Thurs. after Jan. 13, Wed. after March 12, May 6 and 7, Aug. 12. Statute fairs, Tues. and Wed. after October 10, and Wed. after Nov. 22.

KNIGHTON, a market town, parl. bor., and par. of N. Wales, co. Radnor, on the Teme, 28 m. SSW. Shrewsbury, and 138 m. WNW. London. Pop. of parl. bor. 1,655, and of par. 1,853 in 1861. Area of parish, 252 acres. The town comprises two chief streets, intersecting each other at right angles, and the gentle acclivity on which it stands, not only gives it a picturesque appearance, but greatly contributes to its cleanliness. A small modern-built church, subordinate to that of Stowe in Shropshire, and a chapel for Methodists, are the only places of worship; and the charities comprise a free-school and an almshouse. Knighton is principally occupied by tradesmen, mechanics, and maltsters. It has no manufactures, the wool-dyeing and spinning business having ceased to exist. Wool-stapling is carried on to some extent, though much less than before 1811, when a large establishment failed. The market is large, and is attended by dealers from Birmingham and its neighbourhood, who come for meat, poultry, eggs, butter, and cheese. Petty sessions are held monthly. The officers of the borough are a bailiff, burgesses, and constables; but they have little or no authority, and the bailiff's only business is to collect the chief rents of the manor, which belongs to the earl of Oxford. The boundaries of the parl. bor. were not changed by the Boundary Act of 1832, and in 1865 there were 401 registered electors in the bor. of New Radnor, to which Knighton is contributory.

Knighton is called by the Welsh *Tref-y-Clawd*, or 'the town on the dyke,' from the circumstance of its position close to Offa's dyke, which enters the parish on the N., and running due S. about 2 m., may be traced through several parishes into the co. of Hereford.

KNUTSFORD (corrupted from *Cnute's Ford*, so called because the Danish Canute crossed here with his army), a market town and par. of England, co. Chester, hund. Bucklow, 11½ m. W. by N. Macclesfield, 13½ m. S. by W. Manchester, and 154 m. NW. London, on the London and North Western railway. Pop. of town, 3,575, and of par. 4,194 in 1861. Area of parish, 4,300 acres. The town is divided into two parts, called Over and Nether Knutsford, by the brook Birken, an affluent of the Bodlin, which rises about ½ m. S. In Nether Knutsford are the market-place, sessions-house, and county-gaol. The church, a modern structure of brick and stone, with a square tower, was built in 1741, when the parish was separated from that of Rostherne. The living is a vicarage in private patronage. Another church, at Over Knutsford, is in the patronage of Lord de Tabley. The other places of worship are for Wesleyan Methodists, Independents, and Unitarians; and Sunday schools are connected with the two former, as well as the churches. The charities of the town comprise a free school, founded in the reign of Edward VI., and well endowed by an ancestor of the Legh family, a school of industry for 100 girls, supported by the Egerton family (who support also another school at Rostherne), and a parochial school for 70 boys. The manufactures of shag, cotton velvet, sewing thread, worsted, and leather, employ many hands; but the supply of the wants of the opulent gentry in the neighbourhood is a chief source of support to the tradespeople. Races are held annually in July, and are well attended. Knutsford is the election town for the N. division of Cheshire, and sessions are held in July and October. Markets on Saturdays. Cloth and cattle fairs, Whit-Tues., July 10, and Nov. 8.

KOMORN. See COMORN.

KONIEH (an. *Iconium*), a town of Asiatic Turkey, prov. Karamania, cap. of a pach. and sandjiak of its own name, 27 m. E. by S. Smyrna, and 132 m. S. Angora. Pop. about 30,000, chiefly Turks. It extends over the plain E. and S. far beyond the walls, which are about 2 m. in circ.

Digitized by Google

Snow-covered mountains surround the level country on every side except the E., where a dreary plain extends to the horizon. The walls were built by the Suljek sultans, of materials taken from more ancient edifices; and the figures in *alto reliero* which ornament the gates are alleged to be amongst the finest in Turkey. In the middle of the town a small eminence is covered with the remains of a fortified palace, once inhabited by the Seljuk princes. The present public buildings comprise 12 large and numerous smaller mosques (that of Sultan Selim having been built on the model of St. Sophia at Constantinople), several madressas or colleges, 2 Armenian churches, 4 public baths, and 7 khans for the accommodation of merchants. The importance of Konieh belongs to the past, for it has now dwindled into insignificance, and exhibits every mark of desolation and decay. A few carpets and some morocco leather are manufactured here; but trade is in a very languishing state, and far the greater portion of the adjacent territory is permitted to lie waste.

Iconium, the cap. of Lycaonia, mentioned by Herodotus and Xenophon as being on the great post road between Sardis and Susa, is reported by Strabo to have been a well-built town, situated in a fine country, and is celebrated in gospel history as having been the scene of St. Paul's persecution by the unbelieving inhab. (Acts xiv. 1—7.) After the taking of Nicæa by the Crusaders in 1099, it became the residence of the Seljuk sultans of Roum, by whom it was much embellished and enlarged. Frederick Barbarossa expelled them in 1189; but, after his death, they re-entered their capital, and lived in splendour till the irruption of Jenghis-Khan and his son Holukow, who broke the power of the Seljuks. Konieh has been included in the dominions of the Grand Seignior since the time of Bajazet, who finally extirpated the Ameers of Karamania.

KONIGGRATZ (Boh. *Kralowy-Hradecz*, a town of Bohemia, cap. circ. of same name, on the Elbe, 63 m. ENE. Prague, with which it is connected by railway. Pop. 5,061 in 1857. The town is fortified, and has 3 suburbs, some large barracks, a fine cathedral, Jesuits' college, episcopal seminary, gymnasium, high school, and a celebrated orphan asylum. Woollen cloth weaving is the chief employment of the inhabitants. It was taken several times by the Prussians during the last century.

KÖNIGSBERG, a large city of the Prussian states, cap. of the prov. of Prussia Proper, and of a reg. and circ. of the same name, 320 m. N. Berlin, on the railway from Berlin to Wilna and St. Petersburg. Pop. 94,580 in 1861. A bar at the mouth of the Pregal prevents vessels drawing more than 5 or 6 ft. water ascending the river to Königsberg, so that its port is properly at Pillau, at the junction of the Frische Haff with the Baltic. A part of Königsberg is built on an island formed by the Pregel, the houses being founded on piles, as at Venice and Amsterdam. Opposite to this island, and on the N. bank of the river, stands the rest of the city, consisting of the old town, and a quarter to the E. called Lobenicht. The circ. of these 3 quarters, which properly form the city, hardly exceeds 2 m.; but the suburbs are very widely spread, and the wall that encloses the whole is no less than 9 m. in circ. A large portion of the included space, however, consists of gardens and open fields. The streets of the old town are long, narrow, and ill-paved, lined by lofty old-fashioned houses, the basement stories of which project far out in the shape of terraces, with their flights of steps guarded by antiquated brass railings. The old town contains the townhouse, rebuilt in 1774; an anatomical theatre, a hospital for the widows and orphans of citizens, and many large warehouses. The quarter to the E. of the old town contains a large hospital on the river side, a mint, theatre, an orphan house. Here also is the old royal palace or castle, now the government-house. The insulated part of the town contains the council-house, exchange, and university buildings. Its orphan-house is also a conspicuous edifice, but none of these rival the cathedral, which, besides its architecture and ornaments, is remarkable for its organ, erected in 1721, containing 5,000 pipes, and for several monuments of the old dukes of Brandenburg, the founders of the monarchy. There are 7 bridges over the arms of the Pregel.

Königsberg is the seat of the government of the prov., and of a court of appeal and a tribunal of commerce. Its university, founded in 1544, had Kant, who died here in 1804, for one of its professors, and is attended by about 350 students. The city has, besides, three gymnasiums, two seminaries for preachers, with numerous schools, a royal literary society, a celebrated observatory, and various other literary establishments, and a blind asylum. There are manufactures of woollens, cottons, leather, gloves, lace, wax, soap, and refined sugar, with breweries and distilleries on a large scale. The great articles of export consist of wheat, rye, barley, oats, pease, tares, flax and hemp, timber, linseed, ashes, and bristles; the imports being colonial products, cotton and cotton twist, wine, dye stuffs, spices, oil, and coals.

KOOM, a city of Persia, prov. Irak-Adjemi, district of its own name, 186 m. N. by W. Ispahan, and 60 m. S. by W. Teheran; lat. 34° 45′ N., long. 50° 29′ E. Pop. estim. at 7,000. The city stands in an extensive plain, and on the banks of a small river rising at no great distance, and lost eastward in the great salt desert. On approaching the city, the remains of habitations, gardens, and tombs become so numerous as to evince that this district was formerly very populous. Among the sepulchral ruins are upwards of 100 tombs of *imâm zadehs* (descendants of imâms), distinguished by their tiled cupolas. There is a very beautiful college, with a celebrated mosque and mausoleum dedicated to the memory of Fatima, the daughter of Imâm Reza, and containing the tombs also of Sefi I. and Shah Abbas II. The dome is lofty, and with the interior covered with gilt plates. Koom, although formerly a place of some trade in fruit, silk, soap, sword-blades, and white earthenware, has sunk into utter insignificance. The bazaars hardly contain 40 shops, and the only employment of the inhab. is the cultivation of a little corn and rice. In fact, the place is little more than a mass of ruins, and at least two-thirds of the buildings have been untenanted for half-a-century. Its sanctity, however, as a place of refuge and pilgrimage, is generally celebrated throughout Persia, and devotees still order their bones to be brought here for sepulture.

Koom is conjectured to stand on the site of the ancient *Choana*, visited by Alexander. In the Shah Nameh it is named as an ancient city, and its foundation assigned to Kai-Kobad. More dependence, however, may be placed on the statement, that it was either founded or rebuilt by the Saracens, about the beginning of the ninth century. Timur-Leng destroyed it, but it regained its importance under the Sefi dynasty. In Chardin's time there were 15,000 houses, 20 large mosques, extensive bazaars and a handsome bridge over the river; but in 1722, when the Affghans invaded Persia, they pillaged and all but destroyed

Digitized by Google

the city. Repeated earthquakes have also much damaged the remaining buildings, and Koom is now only a melancholy ruin.

KOONDOOZ, an indep. khanat of Central Asia, between the 35th and 38th deg. N. lat., and the 86th and 72nd E. long., at present comprising, as tributary states, Budukshan, and many other small chiefships N. of the Hindoo Koosh. It has N. the territ. of Hissar and Durwaz, E. the Bolor-Tagh mountains, separating it from the Chinese dom.; S. Caufiristan and the Hindoo Koosh, which divides it from Caubul; and W. a part of Affghanistan and the territ. of Balkh. The central part of this dom., or Koondooz Proper, seems to be situated on a lower level than the surrounding provs. It is of limited dimensions, is enclosed by ranges of low hills, and watered by two of the principal tributaries of the Oxus, in the upper part of its course. It is in many parts so marshy, that the roads are obliged to be constructed on piles of wood, fixed among noxious and rank vegetation. The climate is pestiferous; snow lies for three months in winter, but the heat in summer is often excessive. The soil is, however, very fertile; and produces abundant crops of grain. In the marshy grounds rice is the chief product, and in the drier grounds wheat and barley. The revenues of the chief are derived, as in the other E. states, from the land: they are paid principally in kind, and are said to amount to a third part of the produce of the soil. Apricots, plums, and cherries, are plentiful, as are most necessaries of life; a good deal of silk, also, is produced on the banks of the Oxus. Since the conquest of Budukshan, that prov. has been, in a great measure, depopulated, its inhab. being carried off to cultivate the lands of Koondooz, where they die rapidly from the effects of the climate. The surrounding provs. have mostly both a rich soil and a good climate. The inhabs. of Koondooz are mostly Tadjiks. (See BOKHARA.) The khan or *meer* is, however, an Uzbek, Koondooz appearing to be the most southerly region into which the Uzbeks ever penetrated, and afterwards succeeded in establishing their dominion. The army, comprising about 20,000 cavalry with six pieces of artillery, consists chiefly of Uzbeks; but most of the civil employments under the state remain in the hands of the native pop. The khan frequently makes '*chupawals*,' or predatory incursions into the neighbouring territ. of Balkh, and the Hazaureh country, for prisoners, whom he sells for slaves; and the chief of Chitral pays his tribute in human beings, who, being also sold by the Khan, form a principal article of export from Koondooz. There is a considerable trade between Koondooz and the Chinese prov. of Yarkund, and sometimes an exchange of presents. Tea is an important article of consumption. European and other foreign luxuries are derived from Bokhara, in exchange for slaves and cattle sent to its markets. At present, of all the Uzbek states, Koondooz is the most adverse to British influence.

KOONDOOZ, the nominal cap., is in a wide valley, near the confluence of two rivers, about lat. 36° 50′ N., and long. 69° 10′ E. It has formerly been a large town, but its pop. does not now exceed 1,500. It has a mud fort, surrounded by a ditch, and the winter residence of the chief. The largest town in the khan's dom. is Khooloom.

KOROTCHA, or KAROTCHA, a town of Russia in Europe, gov. Koursk, cap. circ., on the river of the same name, and on the road from Voroneje to Kharkoff, 100 m. SW. the former city. Pop. 6,171 in 1858. The town is well built, and surrounded by numerous gardens, and has several churches, nearly all, however, constructed of timber. It has also a saltpetre manufactory, with an extensive trade in apples, for which its vicinity is famous. Korotcha was founded by Michael Fedorovitch in 1658, as a barrier against the incursions of the Crim-Tartars.

KOSTENDIL, or GHIUSTENDIL (*Justiniana secunda*), a town of European Turkey, prov. Roumelia, and cap. sandjiak of its own name, 107 m. N. Salonica, and 192 m. WNW. Adrianople. Pop. estimat. at 8,000. It stands on the N. declivity of the Karasu mountains, at a short distance from the right bank of the Strouma (the an. *Strymon*), and is defended by a crenellated wall flanked with square towers. A bazaar, governor's palace, and several sulphur baths are the only public establishments. Employment is given to a portion of the pop. by the silver and iron mines of the neighbouring mountains.

KOSTROMA, a gov. of Russia in Europe, between 56° 45′ and 59° 12′ N. lat., and 40° 27′ and 48° E. long., having N. the gov. of Vologda, W. Jaroslavl, S. Wladmir and Nijegorod, and E. Viatka. Area 30,400 sq. m. Pop. 1,076,988 in 1858. Surface flat, with some undulations. It is indifferently fertile, being marshy in the N., while in the S. it is sandy and clayey. Climate severe, but healthy. It is watered by the Wolga, and by its important tributaries the Ounja and Vetlouga. Principal corn crop rye, but the quantity grown is insufficient for the consumption. Flax and hemp are largely produced. Cattle few, and but little attended to. This, however, is not the case with the forests, which are extensive, valuable, and better taken care of than those of most other governments. The rivers and lakes furnish abundance of fish. The inhabs. particularly excel in the preparation of Russia leather, and there are various fabrics of cloth and linen. Many of the peasants are masons, carpenters, &c., who seek for employment in the summer season in the contiguous governments; and many are employed at home, in the making of charcoal, pitch and tar, mats, of which there is an immense consumption, boats, and rafts.

KOSTROMA, the cap. of the above gov., on the Wolga, at the confluence of the Kostroma with that river. Pop. 20,630 in 1858. The situation of the town is elevated and agreeable; houses mostly of stone; the rampart of earth by which it was formerly surrounded has been converted into a promenade. It has a handsome cathedral, two large convents, a great number of churches, and a large stone building, or bazaar, for the security, exhibition, and sale of merchandise. There are several tanneries, with manufactures of linen, Prussian blue, soap, and tallow, a bell-foundry. Various fairs, and a considerable commerce.

KOTAH, a town of Hindostan, prov. Rajpootana, on the Chumbul, 195 m. SW. Agra. Pop. estim. at 25,000. The town has some good and well stocked bazaars, and a great number of temples and substantial private houses. The entrances to Kotah are through double gateways, and its walls are surrounded by a fosse hewn in the solid rock. Its chief public edifice is the palace of the rajah, rendered conspicuous by its lofty white turrets, and enclosed by a separate line of works. Kotah has manufactures of cloth and other articles of native consumption. Its territory is among the most flourishing of India.

KOURSK, a government in the S. part of European Russia, having that of Orloff on the N., Voronetz on the E., Kharkoff on the S., and Tchernigoff on the W. Area 17,382 sq. m. Pop. 1,811,972 in 1858. Surface flat, or slightly undulating; soil very fertile; forests not very extensive, and in some parts there is a scarcity of wood.

Digitized by Google

There are no navigable rivers, the want of which is one of the greatest drawbacks on the government. The climate is mild and healthy. Corn is kept in *silos*, or caves, sometimes for 6 or 10 years together, and there is always a large surplus for exportation. Hemp and flax, tobacco and hops, are also produced. The pastures, which are excellent, afford ample provision for large herds of oxen, with horses and sheep. Manufactures considerable and improving, consisting of coarse cloth for the army and the peasantry, leather, soap, saltpetre, spirits, and earthenware.

KOURSK, a town of European Russia, cap. of the above gov., 268 m. S. Moscow. Pop. 27,056 in 1858. The town once had a citadel and ramparts; but the former is in ruins, and the latter has been converted into public walks. Situation elevated; houses principally of wood, but many of stone; streets narrow, crooked, and ill paved. There are two convents, numerous churches, with a gymnasium, a normal school, a hospital, and a foundling hospital. It is a thriving, industrious town, having numerous tanneries, tile and earthenware, and wax and tallow works. It carries on an extensive commerce with Petersburg, Moscow, and Odessa, sending to them cattle and horses, tallow, leather, wax and honey, hemp and furs.

Korennaia Poustyn, a convent in the vicinity of Koursk, is celebrated for a miraculous image of the Virgin, and for a great fair held annually on the ninth Friday after Easter, resorted to equally by merchants and pilgrims.

KRASNOJARSK, or KRASNOYERSK, a town of Asiatic Russia, gov. Yeniseisk, of which it is the cap., in a plain of great beauty and fertility, on the Yenesei, and on the high road between Tobolsk and Irkutsk, 290 m. E. by S. Tomsk. Pop. 7,628 in 1858. Though small, this is a town of some importance, being the emporium of a wide extent of country. It is well built; its two principal streets are broad, and its houses, which are mostly faced with planks, are painted in bright colours. Its chief public buildings are, several churches; an edifice, partly of stone, occupied by the government offices; and a large factory, devoted to several branches of industry, especially coach-building, and the manufacture of Russia leather. The district subordinate to this town is the most productive in the prov. Irkutsk, of grain, cattle, and horses. Within the last fifty years this town has been rising considerably in importance, and it has now a brisk traffic in Chinese and agricultural produce.

KREMNITZ (Hung. *Kormöcz-Banya*), a royal town of Hungary, co. Bacs, and one of the principal mining and coining towns of the kingdom; in a deep valley 10 m. W. Neusohl, and 88 m. ENE. Presburg. Pop. 8,603 in 1857. The walled town comprises a castle and about 40 houses, one of which is the mint, ranged round an open space in which the market is held. In the suburbs are many mining offices, and about ½ m. distant are the smelting furnaces. Kremnitz is ill paved, dirty, and disagreeable. It has 5 churches; one with a lofty gilt and coppered steeple and very gaudy internal ornaments, 3 chapels, a Protestant meeting-house, 2 hospitals, a royal infirmary for miners, a gymnasium, normal and girls' schools, and a Lutheran grammar school; and it is the seat of municipal and mining tribunals, and of a mint, and councils of mines and forests.

The Kremnitz mines have 11 or 12 principal shafts, attached to which are 18 or 20 washing works (*pochwerken*). The best mines belong to private companies, but the richest veins of Kremnitz are for the most part exhausted, and a considerable portion of the former working is under water. The mines at present yield about 15,000 mares of silver, and 250 do. of gold a year. These metals, however, are rarely found pure, but much intermixed with copper, lead, and arsenic. Quartz is the matrix of the ore, which is first reduced by the hammer, to small pieces about the size of stones used for Macadamising roads. The ore is next exposed to the stamping-mill, by which it is pulverised: it is then washed over slanting frames; sometimes roasted, to drive off the sulphur and arsenic; and is finally smelted. The object of this process, which lasts four and twenty hours, is to separate the noble from the ignoble metals, which is effected by the oxydation of the latter. At the moment the oxydation is complete, a bright bluish-white metallic lustre spreads itself over the whole surface of the liquid metal. The impure metals are then allowed to run off, a stream of warm water is passed over the gold and silver to cool them; the solid mass is taken out, cut up into bars, weighed, and sent off to the mint, where the gold and silver are separated and coined. The amount of gold and silver coined at Kremnitz is about 250,000*l.* a year (2,500,000 flor.). The silver is mostly coined into pieces of 20 kreutzers (*zwanzigers*), and the gold into ducats and half ducats. Kremnitz has also a royal vitriol factory, 2 paper-mills, and manufactures of earthenware and vermilion. It is abundantly supplied with excellent water by a water-course carried by a former archbishop of Gran, at his own expense, from the Thurocz to Kremnitz, a distance of 50 m.

KRISHNA, or KISTNAH (the name of a supposed incarnation of Vishnu), a river of Hindostan, and one which bounds an important division of that country; the S. part of the peninsula being entitled 'India S. of the Krishna.' It rises in the W. ghauts, near lat. 18° N. and long 74°, not far from Sattarah; and runs with a very tortuous course E. for about 700 m., through the provs. Bejapoor, Beeder, and Hyderabad, and between Masulipatam and Guntoor; falling into the ocean on the Coromandel coast by several mouths, near lat. 16°, long 81°. Its course lies mostly through a mountainous country, greatly elevated above the sea; its channel is of very irregular depth, much broken by rocks and rapids; and it is altogether ill-adapted for navigation, except in the N. Circars, where it is available for large boats. In the highlands the craft usually employed on it are round bamboo wicker baskets, covered with half-tanned hides, and directed with paddles. Its chief tributaries are the Joongabudra, Gutpurba, and Malpurba, from the S.; and the Seema and Mussy, from the N. Satarah is the principal city on its banks. It is said to be much more productive of gems than the Godavery, diamonds, chalcedonies, onyx, and other precious stones, and some gold, being found in its sediment in the dry season.

KULDSHA, GULDSCHA, or ILI, a city of Chinese Turkestan, cap. prov. Ili or Elè, in lat. 42° 46′ N., long. 82° 48′ 15″, about 450 m. NE. Yarkund. It is said to be 18 Chinese *li* (about 5 m.) in circuit, surrounded by mud walls and wet ditches, and entered by six gates. The town is much better built than either Kotan or Bokhara: the houses are either of stone or wood, seldom of earth, and the streets are traversed by running streams. The inhab. are mostly Chinese; there are, however, about 1,500 Toorkee families, who profess Mohammedanism, but whose dress and customs resemble those of the rest of the pop. The inhab. of Kuldsha are very industrious, and devoted to commerce. Almost every house has a shop, frequently filled with expensive merchan-

Digitized by Google

dise; besides which, the streets abound with moveable stalls, and hawkers going about to sell their wares, Kuldsha being the entrepôt of an extensive region, peopled by nomadic Kalmuck tribes. It is the residence of a Chinese governor.

KUMAON, or KEMAON, a prov. of N. Hindostan, presid. of Bengal, comprising, with Kumaon Proper, that portion of Gherwal SE. of the Alcananda river; chiefly between lat. 29° and 31° N., and long. 78° and 81° E., having NW. Independent Gherwal, NE. the great range of the Himalaya, separating it from Thibet, SE. Nepaul, and SW. the prov. Delhi. Area 6,962 sq. m.; pop. 166,755. The whole country is overspread by mountains successively ascending from SW. to NE., till they reach the height of 25,000 ft. The Ganges in the upper part of its course, the Kalee, and a few of their tributaries, are the chief rivers; there are no lakes of any consequence. The lower portion of the prov. is covered with jungle interspersed with groups of saul, sisso, and other timber trees, and tracts of high reedy grass. The central hilly region is an almost uninterrupted forest; above the elevation of 2,500 ft. the vegetation of the tropics gives place to the pine, oak, and rhododendron. The fruits and vegetables of Europe are common, and thrive well. Wheat, *mandua*, and other dry grains are those principally grown, but rice also is cultivated alternately with the foregoing, a regular rotation of crops being pursued. Hemp is raised in large quantities, and grows luxuriantly to the height of 12 or 14 ft.; little cotton is raised, though it is of excellent quality. The sovereign has the entire property of the soil; and the great functionaries under the native gov. were always paid by grants of land, or by perquisites arising from the soil. The operations of tillage, except ploughing and harrowing, are chiefly performed by women. The implements and operations of husbandry are similar to those in the plains of Hindostan. Irrigation is frequently effected by aqueducts carried a considerable distance, and water-mills, scarce in Hindostan, are here common. The breeds of horned cattle are small, but yield very good milk; there are domestic camels, but they are small, and goats and sheep are principally used for the transport of goods. Elephants, tigers, leopards, and various kinds of deer abound. Copper, iron and lead mines are wrought to some extent; and garnets, rock crystal, and bitumen are met with. Manufactures very few; they include blankets, coarse camlets, hempen cloths, coarse cottons, bamboo mats and baskets, and wooden vessels. Artisans are sufficiently numerous in the towns, but their work exhibits little neatness. It is singular that, though the saw, plane, and turning-lathe be unknown to joiners, the goldsmiths are acquainted with the use of the spirit blow-pipe. The inhabs. at large are more inclined to commerce than agriculture. They carry iron, copper, ginger, turmeric, and other hill drugs and roots into the plain of N. Hindostan, where they exchange them for coarse chintz, cotton cloths, sugar, tobacco, coloured glass, beads, and hardware; and they frequently travel to execute mercantile commissions as far as Furruckabad and Lucknow. The traders of more capital send the products of India across the mountains into Thibet, where they are exchanged for hawks, musk, coarse camlets, wax, incense, and other drugs and roots, the produce of that country; and borax, salt, and gold-dust from Tartary. In the marts of Kumaon, the chief of which are Mandi, Kasipoor, Chilkia, Afzelghur, and Najibadad, sugar-candy, spices, European broad cloths and coral, from the S., are exchanged for shawl wool, coarse shawls, China silks, saffron and hides. Large periodical fairs are held at the above places, whence necessaries are procured, there being no village markets in Kumaon. The country is thinly peopled; the inhabs. are of two distinct races, the dominant being the Hindoo, and the supposed aborigines a race apparently of Tartar origin, many of whom, called *doms*, appear to have been reduced to a state of slavery by their Hindoo conquerors. The native government was despotic in an oppressive degree till the British took possession of the country in 1815; since which the condition of Kumaon and its inhabs. has been progressively ameliorated. Kumaon, like many other parts of N. Hindostan, contains numerous places of Hindoo pilgrimage, and many Hindoo temples.

KUR (an. *Cyrus*), a river of Western Asia, in Georgia, having its rise within the Turkish dominions, not far from Kars, on a S. offset of the Caucasian range, dividing the tributaries of the Caspian from those of the Black Sea, in lat. 41° N., and long. 42° 30′ E. It assumes its name near the town of Akiskar, whence it flows about 80 m. ENE. to Gori. Its course thenceforward is SE., by Tiflis, through the plain of Kara, and afterwards through a lower plain abounding with salt marshes, and in which are several mud volcanoes and petroleum springs. The latter of these plains is frequently overflowed by the river. The total length of the Kur, as measured along its windings, somewhat exceeds 520 m. Its chief affluents are—1. the Alazan, from the main Caucasian ridge, joining the main stream in lat. 40° 56′ N., and long. 46° 51′ E.; and 2nd, the Aras (an. *Araxes*), which rises near Erzeroum, curves northward round Mount Ararat, and thence runs SE., and afterwards NE., to its juncture with the Kur, at Djwat. The Kur at this point is 140 yards broad, and may be navigated by large boats to its mouth on the W. side of the Caspian Sea, a distance of about 100 m. Fishing villages are established on its lower banks, and great wealth is accumulated from the proceeds of these fisheries. A delta at the mouth projects considerably into the Caspian Sea.

KURACHEE, or KARACHEE, the principal sea-port of Sinde, NW. Hindostan, on the E. side of an inlet of the Indian Ocean, 80 m. SW. Hyderabad, and about 18 m. from the W. arm of the Indus. Pop. 22,237 in 1861. Kurachee is built on a low, barren, sandy shore, and is walled. The town is irregularly laid out, and the streets are so narrow that two people can scarcely walk abreast. The houses are chiefly of mud and sandstone, obtained in great abundance from the coast. Kurachee has a considerable trade with Cutch, Bombay, and the principal ports on the Malabar coast. Its harbour is commodious, perfectly safe in all winds, and, though not deep, is capable of sheltering vessels of 200 or 300 tons; so that it is of greater commercial importance than any of the ports on the Indus, which can only be reached from the sea by flat-bottomed boats. Nearly all the Malwa opium exported seaward is shipped at Kurachee. Most of the men engaged in the fisheries of Sinde are from Kurachee, and are superior in intelligence and appearance to the other inhab. of the coast. Kurachee was bombarded and taken in a few hours by a small British force, on the 2nd of Feb., 1839.

KURDISTAN, an extensive country of W. Asia, comprised chiefly within the basin of the Tigris, and belonging partly to Turkey and partly also to Persia; being bounded N. by Armenia, E. by Azerbijan and Irak-Adjimi, S. by Khuzistan and the pach. of Bagdad, and W. by Diarbekir and Algezira. Area roughly estimated at 52,000

Digitized by Google

sq. m.; and pop. at 1,000,000, of whom more than three-fourths are Kurds. The surface of the country is very unequal; but the mountains are much loftier and more frequent in its N. part, the plains in the latter being also considerably more elevated than in S. Kurdistan. Hence there is a great difference of climate in the two sections into which the country is divided. The principal ranges are the Djebel-tagh and Nimrod; the culminating summit being the snow-covered Mount Bisutum, rising 7,500 ft. above the surrounding plain, and about 12,000 ft. above the sea. The geological constitution of these mountains consist of serpentine hornblende and other primary rocks, covered, except in the highest parts, by transition limestone, old red sandstone, and various saliferous formations with other rocks, ascending even, in some parts, to the London clay. The principal rivers are the Tigris, Diala, Great and Little Zab, Kerah, and Kabur. Extensive and rich pasture grounds support great numbers of sheep and goats, the rearing of which constitutes the chief employment of the pop., and their produce almost the whole wealth of the country. Hence, in the Kurd dialect (which is a patois, composed chiefly, though not entirely, of Arabic and Persian), the word *mahl*, which means wealth generally, applies in a primary and more particular sense to flocks of sheep. It is estimated that 500,000 sheep and goats are annually supplied to Constantinople from Kurdistan. Each flock comprises from 1,500 to 2,000 animals, and the time required to take them to their destination is somewhat more than seventeen months. The N. part produces the grains and fruits of middle Europe, while in the S. the plains and valleys produce, in addition, rice, cotton, tobacco, with a great variety of fruits. Excellent timber is found in the forests, and nut-galls form a large article of export at Iskenderoon and Smyrna. Good cultivation prevails in the vicinity of the towns, and more especially between Mosul and Bagdad. The agriculture of Kurdistan is elsewhere, however, in the most primitive condition; and the implements of husbandry are less effective, even, than those of the neighbouring provinces, which owe almost everything to nature and very little to industry.

The Kurds, who inhabit this country, and give to it its distinctive appellation, are commonly considered as a mixed breed of Mongols and Uzbek Tartars, though this is doubtful. They are Mohammedans, of the sect of Omar: their dress much resembles that of the Turks, but it is lighter, and they do not wear the turbans or the long beard. A red bonnet is their usual head-dress, and the outer garment is a cloak of black goat-skin. They are excellent horsemen, and the exercise of the lance, with other military amusements, are points in which they particularly excel. Improvisation is commonly, and, on the whole, not unsuccessfully practised; and their music, though rude, proves that they have a tolerable acquaintance with the art. There are two castes of Kurds, characterised by very different habits. Those of Turkish Kurdistan have fixed habitations, are acquainted with the working of metals, weaving, and other arts, and live subject to their native princes, and governed by their own laws. The nomad Kurds are chiefly found in Persian Kurdistan and in the pachaliks of Diarbekr and Mosul; often roaming over the desert in search of plunder to the neighbourhood even of Damascus and Aleppo. The love of theft and brigandage is a marked feature in the whole race, without exception; and this accounts for their usual carelessness and improvidence about property, for which there is no security. At the same time, all writers agree, that when visited by travellers they exercise the most generous hospitality, and often force handsome presents on their departing guests. The tents of the wandering tribes are low, hastily put together, constructed of coarse black cloth, and generally divided into two parts for the men and women. A defence of reed hurdles surrounds the enclosure in which the tents are pitched, and the horses ready saddled are tied to stakes close to the encampment. Females meet with better treatment among them than in the rest of Asia; neither sex can marry without the permission of relatives, and the constancy of the contracting parties is commonly tried during a long engagement previously to marriage, which with them is considered a sacred and indissoluble tie. Hence the women are considered more as companions than slaves; they are treated with respect, and there is a freedom and openness in their character not to be found in other women of Turkey or Persia.

Turkish Kurdistan comprises the pachaliks of Mosul and Chehrezour, with small parts of the pachaliks of Van and Bagdad. Persian Kurdistan is divided into four districts, Ardelan, Kermanshah, and Kinghiavor, Kermanshah being the cap. and the residence of a beglerbeg. Neither the sultan, however, nor the king of Persia, has any substantial power, their utmost authority being limited to the exaction of tribute, the payment of which they cannot always enforce.

KURILE ISLANDS, a chain of small islands, twenty-five in number, connecting the peninsula of Kamtschatka with the large islands forming the empire of Japan: they are chiefly dependent on Russia, but the three farthest S. belong to Japan. They extend between lat. 43° 40′ and 51° N., and long. 143° 50′ and 156° 20′ E., and occupy a length of more than 700 m. Pop. estimated at 1,200 in 1862. The surface is very irregular, some of the heights rising nearly 6,000 ft. above the ocean, while in other parts deep and narrow valleys are almost on a level with the sea. Volcanic eruptions and earthquakes are of common occurrence, the islands being wholly of igneous origin, indubitably show their connection with the great volcanic band passing SSW. from Kamtschatka to the island of Formosa, through more than 30 deg. of lat. The shores are abrupt and difficult of approach; the coast currents are very violent, especially on the E. or ocean side; and continual fogs, hovering over the islands, render access extremely difficult. The animals and plants differ little from those found in Kamtschatka; and the minerals consist chiefly of iron, copper, and sulphur. The inhab. mostly engage in hunting and fishing; the former supplying them not only with meat, but also with furs, which serve as money for the Russian Americans, Japanese, and Dutch; while the latter furnishes oil, whalebone, and spermaceti. Agriculture is confined to the islands belonging to Japan. The inhab. of the N. islands resemble the Kamtschatdales in honesty, openness of character, hospitality, and shyness to strangers. Those in the S. islands are Ainos, a race similar to the Japanese. These islands were discovered between 1713 and 1720; but they are very little known even now, after the lapse of a century and a half.

KURNOUL, a town of British India, presid. Madras, cap. of a subdivision of the Balaghaut ceded districts, which formerly composed an independent Patan principality. Pop. 21,230 in 1861. The town stands on the Toombuddra, 90 m. NE. Bellary, defended on two sides by that river and its tributary the Hundry, and on the W. strongly fortified, three of its bastions being 50 ft. high, and covered to the parapets of the curtain by a

Digitized by Google

steep glacis. S. of the fort is the *pettah*, or open town, of considerable extent and pop. Kurnoul was considered impregnable by the natives, and neither Hyder nor Tippoo ever attempted its capture; but it was taken by the British, in 1815, after a siege and bombardment of a single day.

KUTAIAH (an. *Cotyæum*), a town of Asiatic Turkey, cap. of the prov. Anatoli and of a sanjiak, 180 m. ENE. Smyrna, and 134 m. W. by S. Angora. Pop. estimated at 60,000, of whom about 10,000 are Armenians, and 5,000 Greeks. The city stands at the foot of a cluster of mountains called the Pursak-Dagh, in which rises the Pursak (an. *Thymbrius*), flowing N. to the Black Sea. The streets, though steep and narrow, contain many handsome and well-supplied fountains, and many of the private houses are large and well furnished. Besides 50 mosques, 20 of which have stone minarets, 1 Greek and 4 Armenian churches, there are 30 *hummums* or public baths, and 20 khans. The house architecture is very similar to that of Constantinople; and good gardens attached to many of the private residences take off much of the sombre appearance common to Turkish towns. The surrounding country is well watered, and extremely productive. Grain, cotton, nut-galls, and different fruits are raised in large quantities for exportation; and goats and sheep are pastured for their hair and wool, which fetch high prices in the markets of Smyrna and Constantinople.

KUTCH, or CUTCH, a small territory of NW. Hindostan, between lat. 22° 45′ and 23° 45′ N., and long. 68° 35′ and 71° 5′ E., having N. and E. the Runn, separating it from Sinde Rajpootana and Gujrat, S. the Gulf of Kutch, and W. the ocean, and an arm of the Indus, which divides it from Sinde. Its shape is elongated; greatest length, E. to W., 160 m.; average breadth, 45 m. Area, 6,764 sq. m.; pop. estim. at 500,536. It is in general arid and barren; but its scenery is bold, forming a great contrast to that of the adjacent provs. on the W. and N. A chain of rocky hills runs through it in its whole length, dividing it into two nearly equal parts. This chain is of no great height, but its peaks rise in wild and volcanic cones of primary formation. It unites at its W. end with another mountain chain, running nearly parallel to it on the N. side, and from both many ramifications are given off. The streams of the prov. are mere torrents, dry when the rains have ceased; there is no navigable river. The scarcity of water is, in fact, one of the greatest drawbacks on the country; and the streams flowing N. of the mountains are all so brackish that, in the hot season, they are not drunk even by the cattle. Good water is, however, usually found 30 ft. below ground. The surface is mostly sandy, the sand resting on strata of clay; but near the hills the country is covered with volcanic matters, which in India are of rare occurrence. Coal and iron of good quality, bituminous and ligneous petrifactions, and fossil animals of a late geological period, are found; and there are some mineral springs yielding alum and other salts in large quantities. The country is generally bare of wood; date trees are pretty common, and the neem, peepul, and babool are met with round the villages, but the tamarind, banyan, and mango are rare, and the cocoa-nut is reared with difficulty even on the sea coast. The arable land is chiefly in the narrow valleys between the mountain ranges towards the S. shore, which latter is the best watered portion of Kutch. Less corn is grown than is necessary for home consumption, and it is imported from Gujrat, Malabar, and Sinde, in return for cotton, &c. The Kutch horse is of a good breed; but other domestic animals, except goats, are generally very inferior.

The singular tract called the Runn of Kutch, extends from the Indus to the W. confines of Gujrat, a distance of about 200 English m. In breadth it is about 35 m.; but there are, besides, various belts and ramifications, which give it an extent of about 7,000 sq. m. It has no herbage, and vegetable life is only discernible in the shape of stunted tamarisk bushes, which thrive by the suction of the rain water. It differs as widely from the sandy desert as it does from the cultivated plain; neither does it resemble the steppes of Russia, but may justly be considered of a nature peculiar to itself. It has none of the characteristics of a marsh; it is not covered or saturated with water, but at certain periods; it has neither weeds nor grass in its bed, which, instead of being slimy, is hard, dry, and sandy, of such a consistency as never to become clayey, unless from a long continuance of water on an individual spot; nor is it otherwise fenny or swampy. It is a vast expanse of flat, hardened sand, encrusted with salt sometimes an inch deep (the water having been evaporated by the sun), and, at others, beautifully crystallised in large lumps. So much is the whole surrounding country imbued with this mineral, that all the wells dug on a level with the Runn become salt. Fresh water is, in fact, obtained only on what may be called the peninsulas and islands of the Runn, tracts of land elevated above the rest of that region, covered with verdure, and moderately peopled by a pastoral race. The Runn has every appearance of having been an inland sea; and the natives of Kutch have a tradition, that it was such about three centuries ago, and that Nerona, Bitaro, and other places on its limits, were formerly sea-ports. This is apparently confirmed by ship nails, and stones shaped like those still used as anchors, being frequently met with; and in one instance the hull of a vessel of some size was found imbedded in the soil. During the SW. monsoon the sea overflows a large part of the Runn; and it is also sometimes partially inundated by the Loonee, Bunass, Sundrawuttee, and other rivers, which lose their waters in it.

The *mirage* is here continually presented in wonderful perfection; and the wild ass, the only inhab. of this desolate region, appears often to the traveller at a distance as large as an elephant.

Kutch has undergone many political vicissitudes which have been singularly connected with natural phenomena. In 1762, the ruler of Sinde, unable to conquer this prov., threw a *bund* or dam across the Phurraun, the E. arm of the Indus, and converted the NW. portion of Kutch from a fruitful rice district into a sandy waste. In 1819, a violent earthquake shook every fortress throughout Kutch; destroyed Bhooj and Anjar; submerged Sindree; and upheaved the *Ullah bund* (mound of God) across the former course of the Phunnaur, a tract of soft clay and shells, 50 m. long, perhaps 16 broad, and many feet in height. In 1826, the Indus burst through the *Ullah bund*, and, after an interval of 65 years, resumed its former channel, with a depth at Sindree of three fathoms; a circumstance which may perhaps restore to Kutch a portion of its former commercial importance.

The chief towns of the prov. are Bhooj, the cap., Mandavee, the principal port, Luckput, Moondra, Anjar, and Kotara. The exports are chiefly cotton, glue, and oil, which are transported in coasting vessels of from 25 to 220 tons. The natives excel in naval architecture, and are noted for their skill and daring as seamen and pilots. The social organisation is analogous to that which prevailed in many countries of Europe, in the middle ages.

Digitized by Google

The rao is the head of a kind of feudal aristocracy, each member of which is absolute within his own domains. The rao can summon them all to his standard, with their followers, but he must pay them; the number of chieftains is about 200, their annual revenue varying from 100 to 30,000 rupees each. The Jharejahs, to which sect the rao and his chieftains belong, are of Sindian origin, and are a degraded, ignorant, and sensual race, who pass their lives in indolence and drunkenness. They uniformly marry Rajpoot women; and their pride is so great, that, lest their daughters should disgrace them by marrying into inferior ranks, they are said sometimes to destroy them in infancy. The abolition of female infanticide formed the subject of an express stipulation between the British government and the rao; but there is reason to believe that it still prevails. The religion of the pop. is a mixture of the Hindoo and Mohammedan.

KUTTENBERG (Boh. *Kuttnahora*), a town of Bohemia, and, after Prague, Reichenberg, and Eger, the most populous in the kingdom, circle Czaslau, 38 m. ESE. Prague. Pop. 12,727 in 1857. The town had a larger number of inhab. before the failure of the veins of silver in the mines near it. The latter, however, still furnish copper, lead, arsenic, and zinc; and mining industry is the principal dependence of the inhab. The town has several public edifices, the principal being the church of St. Barbara, a fine Gothic building. It has also a high school, a military school, an Ursuline convent, a hospital, and factories for printing cottons and spinning cotton yarn. A good deal of starch is made for exportation to Silesia. The first German coins, called silver groschens, were struck here in 1300.

KUZISTAN (an. *Susiana*), a prov. of Persia, sit. between lat. 30° and 33° N., and long. 47° and 51° 30′ E., being bounded NW. by the pachalik of Bagdad, N. by Louristan, E. by Farsistan, and S. by the Persian Gulf. Length about 240 m., breadth 130 m.: supposed area, 9,600 sq. m. The country is divided between the territories of the Chab-Sheikh and those forming the government of Shuster. The Chab territories extend from the Chab to the confluence of the Karoon and Abzal, and from the shore of the Caspian Sea to the range of hills skirting the valley of Ram-Hormuz. This part of the country consists principally of sandy plains and morasses, wholly destitute of vegetation. Eastward, also, intersected by the river Tab, on the banks of which are a few cultivated spots, is a desert about 30 fursungs long, and varying in breadth from 10 to 16 fursungs. The most fertile spots in this part of Kuzistan are near Dorak, the capital of the Chab territories, and in the delta of the Euphrates: in the latter, dates and rice are produced in great abundance on well-irrigated lands, the rice harvest taking place in August and September. The grain-harvest is in April and May; but the produce is insufficient for the consumption of the district. The N. and W. parts of the country afford tolerable pasturage; and here the wandering tribes, comprising the greater part of the pop., pitch their tents. The chief towns of the Chab territory are Dorak (the capital, with a pop. of 8,000, and a manufacture of Arabian cloaks, largely exported), Ahwaz, Endian, and Mashoor. The territories attached to the government of Shuster comprise the fairest part of Kuzistan: four noble rivers, with their tributaries, irrigate the plain in every direction. Its riches in Strabo's time consisted of cotton, rice, sugar, and grain, yielding a hundred-fold; but it is at present little better than a forsaken waste, the only signs of cultivation being near Bundekeel and Haweeza.

L.

LABRADOR, an immense peninsula of British N. America, opposite the island of Newfoundland, from which it is separated by the strait of Belleisle, extending between the 50th and 64th parallels of N. lat., and between long. 56° and 78° W.; being bounded S. by Canada and the Gulf of St. Lawrence, E. by the Atlantic Ocean, N. by Hudson's Straits, and W. by Hudson's Bay. Area estimated at 170,000 sq. m., with a fixed pop. of 5,000, consisting chiefly of Esquimaux, with but a few Europeans. Labrador is generally described as one of the most dreary and naked regions of the globe, exhibiting scarcely any thing except rocks destitute of vegetation. But, though this be its appearance when seen from off the coast, on penetrating a little into its interior, the surface is found to be thickly clothed with pines, birches and poplars, and with a profusion of delicate berries. It is everywhere most copiously irrigated by brooks, streams, ponds, and lakes. A chain of high mountains appears inland, but their height is not correctly known. Mount Thoresby, near the coast, is 2,730 ft. high. The Labrador felspar is found chiefly in the vicinity of Nain. The prevailing rock is gneiss, overlaid by a bed of sandstone, alternately red and white, and strongly marked with iron near the surface: above this again are varieties of secondary limestone, arranged in parallel strata, and full of shells. A few miles from the shore, the secondary formations disappear, leaving gneiss and mica-slate on the surface. (Geog. Journ., vol. iv. p. 208.) The climate is extremely severe, the thermometer occasionally falling below zero of Fahr.; the summers are of short duration, with an average day temperature of 58°. The prevailing winds, on the E. coast, are from WSW. to NW.: there is less fog than on the neighbouring island of Newfoundland, and the straits of Belleisle are never frozen over. Corn will not ripen; but potatoes, cabbages, spinach, and turnips answer pretty well. The wealth of the country, however, consists chiefly in the abundance of fish on its coasts. Whales, cod, salmon, and herrings are extremely plentiful. The Labrador fishery is nearly confined to the SE. tract, opposite Newfoundland: within a few years it has increased six-fold, and it now rivals that of Newfoundland. During the fishing season, about 300 schooners come from the latter to the fishing stations of Labrador, and about half the produce is sent to St. John's, the remainder being exported to England, Lisbon, and the Mediterranean, by English and Jersey houses unconnected with Newfoundland. The American fishing vessels average about 400, principally sloops and schooners, manned by crews varying from 9 to 13 hands, making a total of about 6,000 men. Each man catches, at an average, about 100 quintals of fish during the season; and the oil is in the proportion of 1 ton to 200 quintals. They frequent chiefly the N. part of the coast, clean their fish on board, and leave Labrador early in September. About 10 ships from Quebec, and 120 from Nova Scotia and New Brunswick, carry away fish and

Digitized by Google

furs to the value of about 60,000*l.* a year: the French, also, send a few vessels, but they are not successful fishermen. From 16,000 to 18,000 seals are taken in the spring and autumn, producing about 350 tons of oil; and the export of furs of wolves, bears, foxes, and beavers caught in the interior, averages 4,000*l.* per annum.

The native pop. of Labrador, the Esquimaux, are of small stature, and in their language, persons, and manners, bear a near resemblance to the Greenlanders. Their food consists chiefly of the flesh of seal, rein-deer, and fish; and their dress is entirely of skins. Their houses in winter resemble caverns sunk in the earth, and consist only of one apartment, which, though not very large, generally contains several brothers, or other relatives, with their wives and children. In summer, they dwell in tents of a circular form, constructed of poles, and covered with skins sewed together, which they are continually moving from place to place. They have always a great number of dogs about their camp; which, besides serving to guard the habitation, and to draw the sledges, are occasionally used as food, and their skins made into clothing. The European residents are English, Irish, or Jersey servants, left in charge of the property in the fishing-rooms, and who also employ themselves in catching seals. Their principal settlements are at Bradore Bay, l'Anse-le-blanc, and Forteau Bay, the last being by far the most considerable. The Moravians formed their first settlement in 1752. Their habits, and quiet, unobtrusive life, render them comparatively unknown. They trade with the Esquimaux, bartering coarse cloths, powder, shot, guns, and edge-tools for furs and oils. Their influence is alleged to have been very beneficial to the natives, not only in changing their religious belief, but in improving both their moral and physical condition. Murder, and acts of violence, are much less frequent than formerly, and mutual enmities have been removed. Their boats, houses, and fishing implements are better constructed, and many of them have begun to exercise foresight and economy. The Moravian settlements are at Nain, Okkak, Hopedale, and Hebron, all on the E. coast.

The coast of Labrador was first discovered by Sebastian Cabot, in 1496; but it was not visited till 1501, when Corte Real called it *Terra Labrador* (cultivable land), to distinguish it from Greenland, which he named *Terra verde*. The name is now applied not only to the E. coast but to the whole peninsula, including that part on Hudson's Bay called the E. main.

LABUAN, a small island off the NW. coast of Borneo, a dependency of the British crown, about 6 m. distant from the nearest point of the mainland, and 30 m. N. from the city of Borneo or Bruni; lat. 5° 12′ N., long. 115° 19′ 36″ E. It is from 25 to 30 m. in circ., flat and covered with wood. Pop. 3,345 in 1863, of whom only 40 Europeans. The anchorage, on the E. side of the island, is protected by the greater and three smaller islands; and the town of Victoria has been founded at the embouchure of a rivulet in a small bay, at the head of the anchorage. Coal of good quality is found on the island, and it is well supplied with fresh water. It was ceded by the Sultan of Borneo to Great Britain in 1846; and Sir James Brooke, who negotiated its cession, was appointed the first governor, and retained his post till 1848. The government is administered by a governor and a legislative council, consisting of the governor and two justices of the peace. Justice is administered by the general court established by a local ordinance, which consists of a governor as president, with two or any greater even number of justices of the peace. Cases of treason and murder are tried with a jury of seven persons, and a verdict may be returned by a majority of five. The expense of the establishments at Labuan has been, for the most part, defrayed from imperial funds. The amount voted by parliament in 1860–1 for Labuan was 6,655*l.*; 1862–3, 4,374*l.*; 1863–4, 5,250*l.* Amount voted, 1864–5, 4,233*l.*

The imports of Labuan amounted to 37,842*l.* in 1860, and to 71,365*l.* in 1863; the exports to 12,603*l.* in 1860, and to 22,322*l.* in 1863. The products at present are small, but coal of good quality abounds; it is expected that its supply will be of great service to the ships trading between Singapore and China. Labuan has a fine port; there are no duties on imports or exports. The temperature varies little during the year, ordinarily the thermometer stands at 75° at daybreak, and 86° during the heat of the day; the extreme ranges are from 71° to 90°. The average fall of rain is 160 inches for the year, and it generally falls at night.

The governor of Labuan is also British consul at Borneo. Borneo, or Bruni, on the adjacent shore of the mainland, the residence of the sultan of Borneo Proper, has been termed the Venice of the East. It contains from 30,000 to 40,000 inhabitants, mostly Malays, and it appears as if floating on the waves. It is situated on an estuary, and though built with little regard to regularity, it is intersected crosswise by two main streets, which divide it into four portions, one only of which stands on dry land. The houses in the other three parts are of wood built on piles, which support them above the water, with streets, if so they may be called, to admit the passage of canoes. The steamer which conveyed Sir James Brooke to Borneo, when Labuan was ceded, anchored in the main street, in the centre of the town.

The greatest novelty at Bruni is the floating bazaar. There are no shops in the city, and the market is held every day in canoes. These come in at sunrise every morning from every part of the river, laden with fresh fruit, tobacco, pepper, and every other article which is produced in the vicinity; a few European productions, such as handkerchiefs, check-cotton prints, &c., also make their appearance. Congregated in the main streets, the canoes are tacked together, forming lanes through which the purchasers in their own canoes paddle, selecting and bargaining for goods with as much convenience as if the whole were transacted on *terra firma*. The gold mines of Borneo are amongst the richest of the world. At the beginning of the present century, about 32,000 Chinese labourers were employed in these mines on the W. coast of Borneo; and it is not easy to say how productive they might become, were the miners in a condition to prosecute their undertakings in safety, and to bring the resources of science and of capital to their aid. Antimony is also found in abundance in Borneo, especially in the district of Sarawak; and the diamonds of Borneo rival those of India and Brazil. The sago palm grows in great perfection in many parts of the island, and sago is largely exported in a rough state to Singapore. The areca nut, rattans, gutta percha, gum-benjamin, camphor, and birds' nests are also considerable articles of export; and sugar, pepper, and nearly all the products of tropical regions are raised in most parts of the island.

LACCADIVE ISLANDS (*Laksha-Dwipa*, 'a lac of isles'), a group in the Indian Ocean, lying chiefly between lat. 10° and 12° N., and long. 72° and 74° E., about 75 m. from the Malabar coast

Digitized by Google

There are 19 principal isles, but the largest is not more than 6 sq. m. in extent. Most of them are surrounded by rocks and coral reefs: the water near them, however, is deep, and they are separated by several wide channels, frequented by ships passing from India to Persia and Arabia. They are inhabited by a race of Mohammedans called Moplays. They do not yield grain, but produce an infinite quantity of cocoa-nuts, from the husks of which the inhab. form *coir* cables, which are more elastic and durable than hemp, as the sea-water, instead of rotting, preserves them. These islands are well supplied with fish, and export the small shells called cowries, which pass as coin all over India. Jaghery, a little betel-nut, plantains, a few eggs and poultry, and coral for conversion into lime, are their remaining exports; but they are of little importance, and the inhab. are wretchedly poor. Vasco de Gama discovered these islands in 1499: they were dependent on Cananore till ceded by Tippoo, in 1792, and came into British possession with the rest of that sovereign's dominions.

LADAKH, an independent country of W. Thibet, between 32° and 36° N. lat., and 76° and 79° E. long.; bounded on the N. and NE. by the Karakorum mountains, which divide it from the Chinese provinces of Yarkund and Khoten, E. by Chanthan, Rodokh, and Gardokh; S. and SE. by the Himalaya, separating it from Cashmere, and the territories of Bissahar, Kulu, and Chambu; and W. by Baltea, or Little Thibet. Length, N. to S., rather more than 200 m.; average breadth, 150 m. Area estimated at about 30,000 sq. m., with a pop. of from 150,000 to 180,000, chiefly of the Thibetan race. The country is divided into 4 districts; Ladakh Proper in the centre, Nobra to the N., Zanskar SW., and Piti SE. It is an inhospitable land, its surface being, for the most part, a succession of lateral mountain ranges belonging to the Himalaya, the lowest range rising nearly to the limit of perpetual snow. Lé, the cap., is more than 11,000 ft. above the level of the sea, and some parts of the prov. Nobra are 2,000 ft. higher. The passes that lead into Ladakh from the S. are above 16,000 ft high, and many summits in the central part of the country are much more lofty. Narrow and deep valleys, of great length, watered by considerable rivers, intervene between the mountain ranges, and comprise nearly all the cultivable land of the country. The chief of these valleys is that of the Upper Indus here called the Singh-kha-bab. This extends SE. and NW. through the greatest part of the country. The Indus, while within Ladakh, receives the Zanskar, Zakat, and Dras rivers; the Shakut, its chief affluent N. of the Himalaya, flows principally through Ladakh, but does not join the main stream till it has passed into Little Thibet. Nearly all the rivers of Ladakh are tributary to the Indus; in the S., however, are several which join the Sutlege, of which the Piti is the chief. There are some considerable lakes. The country is subject to extremes of temperature. Frost, snow, and sleet commence early in Sept., and continue, with little intermission, till the beginning of May. From the middle of Dec. to the beginning of Feb., Moorcroft found the thermometer out of doors at night seldom above 15° Fahr. But during the summer the sun has great power; and at Lé, in July, the thermometer has been found, at noon, to stand, in the sun, at 134° Fahr., and between Lé and Piti, at 10° higher. The atmosphere is, in general, dry and clear; what little rain occurs falls chiefly during the summer months. The mountains being of primitive formation, the soil consists almost entirely of disintegrated rocks washed into the bottoms by the action of thaws and torrents. The decomposed granite and felspar clothes these portions of the surface with a coating of clay, sand, gravel, and pebbles, which skill and industry can only render productive. Both climate and soil being thus hostile to vegetable life, the general aspect of the country, where not cultivated, is of extreme sterility; a few willows and poplars are the only timber trees; and the chief verdure consists of the Tartaric furze, with a few tufts of wormwood, hyssop, dog-rose, and other plants of the desert.

Notwithstanding these unpromising circumstances, the harvests of Ladakh are by no means niggard; and year after year equally abundant crops are raised from the same land, without its ever being suffered to lie fallow, and without any attempt at an alternation of produce. The mountain sides are formed into a succession of terraces, supported by stone breast-works, down which stone channels conduct a plentiful supply of water, and the *detritus* from the rock. The stone dykes are not only disposed to form terraces near the towns and villages, but in spots remote from human habitations, where they are constructed by the peasantry, and suffered to remain undisturbed for many years, perhaps for some generations, till a quantity of earth is collected.

The field thus gained from the mountain has next to be supplied with manure. As wood is very scarce, the faeces of cattle are mostly used as fuel. The floors of the houses are strewed with a coating of gravel, three or four inches thick, which is removed from time to time, and this, with the ashes of the burnt fuel, forms almost the only manure that sustains the nutritive properties of the soil. Wheat, barley, and buckwheat are the chief grains cultivated. The wheat is of three, the barley of two varieties: one of the latter, the *sherokh*, or naked barley, is a superior kind, especially for malting, but it degenerates in a lower level, as in the adjacent plains of Hindostan. Wheat and barley are usually sown in May, and reaped in September, the great heat of the sun in summer fully compensating for the shortness of that season. At Pituk, near Lé, more than 10,000 ft. above the sea, barley is ready for the sickle in two months from the time of sowing. The plough is entirely of wood, generally willow, except the point, which is formed of a small piece of iron. The furrow is not more than four or five inches deep; but the earth is well broken, and the seed is afterwards carefully covered over. Ploughing is performed by a pair of zhos (a hybrid male between the yaik, *bos grunniens*, and common cow), or zebus, driven without reins, but, with the utmost precision, by the voice, or by a wand. The ground is ploughed twice; the grain is sown broad cast in the furrow, or planted by the dibble. Corn is frequently reaped while green, and laid on the ground in flat bundles to ripen more completely. In very dry soils the grain is pulled up by the roots, the straw being valuable for fodder; in moist soils, it is cut close to the ground by a curved, short-bladed sickle. There is no great variety of kitchen vegetables; but onions, carrots, turnips, and cabbages are raised in some places, and carraway, mustard, and tobacco are grown in a few gardens. Plenty of apricots and apples are raised everywhere, but few other kinds of fruits. Pears, grapes, and melons are imported from the neighbouring countries. Lucerne grows with great luxuriance in some parts, and a species of saintfoin is met with in the mountains; but the most valuable source of fodder is, perhaps, the

Digitized by Google

prangos (*Prang. patularia*, Lindley). This plant, which is a perennial delighting in a poor sterile soil, but growing in every variety of site, except actual swamp, is common in the W. of Ladakh, and varies in size, from a cluster of leaves and flowers, to from 12 to 18 ft. in circ. In August or September, the plants are cut to within two or three inches from the ground, on which they are laid in bundles to dry, and afterwards piled like other kinds of fodder, on the house tops. The prangos require no shelter. In the winter, about 1 cwt. for 24 hours is considered sufficient for 20 sheep, or 30 lambs. Healthy sheep fed upon it become fat in 20 days; it is also excellent food for cattle and horses, though perhaps less so than for sheep. Rhubarb is an abundant indigenous product.

The yaik-mule, or zho, is principally used for the transport of burdens; horses are few and small, though active and hardy. The native breeds of sheep, though mostly larger than those of India, are much smaller than the sheep of Chan-than. One species, the Purik sheep, is very diminutive; but it gives 2 lambs in 12 months, about 3 lbs. of wool a year, at two shearings, and its mutton is excellent. Being domesticated like the dog, it is maintained at a very small cost. The shawl-wool goat is the common breed in this and the neighbouring countries; the fleece is finer in Ladakh than elsewhere. The latter is cut once a year; the wool picked out is sent to Cashmere, and the hair made into ropes, coarse sacking, and blankets, for home consumption. The wild animals are not numerous: the ibex, wild sheep, *ovis ammon*, and a kind of wild horse, are the principal. The leopard, jaguar, ounce, bear, and lynx are rare. Fish are very plentiful, but the prevailing religion prevents their being used as food.

Sulphur is found in some places, and soda in great plenty on the Indus, and in the N., lead, iron, and copper are said to exist, and gold in the sands of the Shayuk; but the government, from politic or superstitious motives, has prohibited the search for this metal.

The native trade of Ladakh is of no great amount; but its transit trade is important from the country being the great thoroughfare for the commercial intercourse between Thibet, Turkestan, China, and even Russia, on the one hand, and Cashmere, the Punjab, and the plains of Hindostan, on the other. Ladakh is the entrepôt for the goats' wool, of which the Cashmere shawls are made, and which is partly supplied from this country, but chiefly from Rodokh and Chan-than. About 800 camel loads are annually exported to Cashmere, to which country, by ancient custom and engagements, the export is exclusively confined, all attempts to convey it elsewhere being punished by confiscation. In like manner it is considered illegal in Rodokh and Chan-than to allow a trade in shawl-wool except through Ladakh; and, in the latter, impediments are opposed to any import from Yarkund, though the wool of that province be of superior quality and cheaper. The fleece of the wild goat is exported in smaller quantities to Cashmere, and wrought into shawls, soft cloth, and linings for shawl-wool stockings; this material is softer and warmer than the ordinary shawl wool, but is much less used for shawls. Sheeps' wool is wrought into cloths exported to Kotoch and Kulu; and many Chan-than sheep are exported to the mountain-states, where they are extensively used as beasts of burden, carrying from 25 lbs. to 30 lbs. weight. Tea comes from China through Lassa and Yarkund, and is exported in considerable quantities to Cashmere and the Punjab: inferior kinds of the same shrub are imported from the British territories of Bissahar, and used by the lower classes in Ladakh. Borax and salt from Thibet; silks, silver ingots, and various manufactured articles from China; felts, camlets, dried sheep-skins, steel, boots, Russia leather, brocades, velvets, and broad cloths, horses, and drugs from Yarkund; cooking vessels, water-pots, and about 300 maunds of dried apricots, yearly from Baltee; shawls, chintzes, copper-tinned vessels, and other domestic utensils, and grain, from Cashmere and the Punjab; ghee, honey, raisins, and grain, from Hindostan; and iron and hardware manufactures, wooden tea-cups in large numbers, from Bissahar, are the remaining principal imports into Ladakh. The imports from Yarkund, of Russian goods, are mostly intended for the Punjab. The dried fruits from Baltee are exchanged for foreign wool, and the goods from Cashmere and the Punjab are partly re-exported into the Thibet provinces.

The government is despotic; but the rajah has very little real power, being controlled by the *lamas*, or priesthood, by whom he is occasionally deposed. The business of the state is carried on by the khalun, or prime minister, the deputy khalun, the lom-pa, or chief military officer, the treasurer, who is a lama, and the master of the horse. The towns and districts are governed by inferior khaluns; and the magistracy is discharged by officers called nar-pas, and by the head men of villages. Most of these are paid by assignments of land, and by claims on the people for contributions or articles of daily use. The rajah, khalun, and lom-pa divide among them the produce of the imports on merchandise in transit, and carry on a trade in shawl wool and tea, from which most of their income is derived.

In spiritual affairs Ladakh is subordinate to the authority of the supreme pontiff of the Buddhists, the grand lama of Thibet, who appoints the chief lamas of this country. The lamas are very numerous, every family in which there is more than one son furnishing one, who is a family priest, attached to a monastic institution or college, though living ordinarily among the people, and conducting the rites of their daily worship. All profess poverty and celibacy, though a man who has been married is admissible into their order. The lamas do not confine themselves to strictly religious duties, but cultivate the land, rear sheep and goats, and take an active share in the fiscal and political administration. There are many conventual establishments for females.

Mohammedanism has of late made great progress in the S. and W., but the mass of the pop. are still Buddhists. Their religious belief and practice is a strange mixture of metaphysics, mysticism, morality, fortune-telling, juggling, and idolatry. The doctrine of the metempsychosis is curiously blended with tenets and precepts very similar to those of Christianity, and with the worship of grotesque divinities. The lamas recognise a sort of trinity, or a triad consisting of a paramount deity, a prophet, and a book; and the people are exhorted to truth, chastity, resignation, mutual forbearance, and good-will. The religious service performed daily at the temples attached to monasteries consists chiefly of prayers and chanting, in which the mystic sentence, '*Oom mane pare me oom*,' is frequently repeated, and the whole is accompanied with the music of wind instruments, chiefly harmonising with tabrets and drums.

The military force consists of a peasant militia, very ill equipped and inefficient; and there is little to prevent Ladakh falling permanently under

Digitized by Google

the dominion of some one of its more powerful neighbours.

There is little wealth in the country, but what exists is equally diffused, and the great body of the people are in easy circumstances. They pay no money taxes to the state, but are bound to suit and service, both domestic and military, and furnish contributions in kind for the support of the rajah and the governors of districts. The people are in general mild and timid, frank, honest, and moral, when not corrupted by communication with the dissolute Cashmerians; but they are indolent, exceedingly dirty, and addicted to intoxication. Their food is nourishing, and consists chiefly of rice, meal porridge, bread, vegetables, tea, wheaten cakes, and once a day the flesh of sheep, goats, or yaiks. The wealthy drink grape juice and water or sherbet, the poorer classes a kind of beer, called chang, made of fermented barley. All orders and both sexes dress chiefly in woollens; to which the men add mantles of flowered chintz, and brocade or velvet caps, and the women cloaks of cotton, China satin, or Benares brocade lined with sheep skin, the wool inwards, and numerous ornaments. Both sexes wear leather boots, in which they take great pride. Some curious domestic customs prevail: among others, polyandry is common, the younger sons of a family being subordinate husbands to the wife of the elder brother; and when the latter dies, his property, authority, and widow, devolve upon the next brother.

History.—Ladakh originally formed one of the provs. of the kingdom of Thibet; but when the Chinese conquered that country, they did not extend their sway to Ladakh, which seems to have retained its own princes. About 200 years ago, the Kalmuck Tartars invaded Ladakh, and the rajah fled to the governor of Cashmere, who, with the permission of Aurungzebe, reconquered the country for the rajah. From that time a small annual present was made to the emperor of Delhi through the governor of Cashmere. Runjeet Singh took possession of Ladakh, and exacted a tribute; but, after his death, the country recovered its former independence. A small annual tribute or present is, however, sent to the authorities of Gardokh, on behalf of the government of Lassa.

LADAKH, or LÉ, the cap. of the above country. See LE.

LADOGA (LAKE), a lake of Russia in Europe, surrounded by the governments of Petersburg, Olonetz, and Wyborg in Finland, and extending from lat. 59° 58′ to 61° 46′, and from long. 29° 50′ to 32° 55′ E. The Ladoga is the largest collection of fresh water in Europe. Its length, NW. to SE., is about 125 m.; greatest breadth about 70 m. Area estimated at from 6,200 to 6,300 sq. m. Its depth is very unequal. It receives about 60 rivers, the chief of which are the Vuox, connecting it with the Saima Lake in Finland; the Svir, by which the surplus waters of the Lake Onega are poured into it; the Volkhov, by which it communicates with Lake Ilmen; and the Siass, like the latter, from the S. It discharges its surplus waters by the Neva into the Gulf of Finland. Its shores are generally low; on its NW. and S. banks are situated Serdobal, Kronsborg, Keksholm, Schlusselburg, and New Ladoga. It has several islands, chiefly towards its N. extremity; and is so full of rocks and quicksands, and subject to storms, that, to avoid it, Peter the Great began, in 1718, the Ladoga Canal, from New Ladoga, on the Volkhov, to Schlusselburg, on the Neva, along the S. shore of the lake, a distance of about 70 m. This work was finished under the Empress Anne, in 1732: it is 74 ft. broad, and, according to the season, from 4 to 8 or 9 ft. deep, and has 20 large, besides many smaller, sluices. It is annually navigated by an immense number of boats, chiefly with merchandise for Petersburg. The canals of Siass and Svir form, with that of Ladoga, a continuous chain of communication round the S. and SE. shores of the lake; and the canal of Tikhvine (Novgorod) places it in direct connection with the Wolga.

LADRONES, or MARIANNE ISLANDS, a group of islands in the N. Pacific Ocean, belonging to Spain, between the 13th and 21st deg. of N. lat., and the 144th and 146th of E. long. There are about twenty of them; but five only are inhabited, and these lie near the S. extremity of the cluster. They are so close together, and are also so broken, as well as irregular in their form and position, as to appear like fragments, disjointed from each other, at remote periods, by some sudden convulsion of nature. Those fragments have a very barren and unpromising aspect. In particular spots there are scattered patches of verdure; but, in general, little better than naked rocks appear, and scarcely a tree or shrub is visible among them. The coast of the islands consists mostly of black or dark brown rocks, honeycombed in many parts by the action of the waves. Their geological constitution is almost wholly volcanic, and some volcanoes have been in action in modern times. The climate is generally serene and temperate, the tropical heats being much diminished by the regular sea-breezes. During the months of July and Aug., however, the weather is intolerably hot; and at the season of the W. monsoons, between June and Oct., the most tremendous hurricanes are experienced at the full and change of the moon. The surface of the interior is much broken, and rises into high hills and even mountains; but the soil in the valleys is of great fertility, and, if properly cultivated, would produce abundantly most of the intertropical plants. Anson visited the Ladrones in 1742, and describes Tinian as abounding with every thing necessary to human subsistence and comfort, and being withal of a most pleasant and delightful appearance, diversified by a happy intermixture of valleys and gently rising hills, the woods consisting of tall and well spread trees, with fine lawns interspersed. The same island being, however, visited by subsequent navigators, was found to have become an uninhabitable wilderness, overgrown with impenetrable thickets. The reason of this change was, that the Spaniards, by whom these islands had been conquered, had, for what reason it seems difficult to conjecture, removed the inhab. from Tinian to another island, and after their departure it soon degenerated into a state of nature, and, when last visited, was nothing better than a wild and savage wilderness. This statement, however, does not apply to the whole group; for cotton, indigo, rice, Indian corn, sugar, and the plantain thrive in other islands, and produce abundant supplies for the pop. Cattle, horses, mules, and asses are numerous, and the llama has been introduced with success from Peru. Wild hogs also are found in great numbers, many of them of a large size, weighing 200 lbs., particularly on the island of Saypan. They are very fierce, and when hunted by dogs make a formidable resistance. The fish that are found on the coast are said to be very unwholesome. The tripang, or holothuria, is caught by the natives, and sold to the Chinese. The country is infested with musquitoes, and with endless varieties of loathsome insects. The natives are tall, robust, and active; the men wear scarcely any covering,

Digitized by Google

and the women only a petticoat of mat. Both sexes stain their teeth black, and many tattoo their bodies. Their huts are formed of wood from the palm tree, and divided by mats into several apartments devoted to distinct uses. They are good swimmers, and extremely clever in managing their canoes, in which, with a good wind, they will sail at the rate of 20 m. an hour. Their number, in the middle of the 17th century, is supposed to have amounted to 150,000, though this is probably far beyond the mark; but the race has been so much thinned by the cruelties practised on them by the Spaniards, that the present Indian pop. scarcely exceeds 4,000. Guajan, the largest island, contained in 1856 only one Indian family, its inhab. consisting of settlers from Mexico and the Philippine Islands. The cap. is San Ygnacia de Agana, the seat of the Spanish governor. The number of Spaniards is very small.

The Ladrone Islands were originally discovered by Magellan, who called them *Las Islas de las Ladrones*, or *The Islands of Thieves*, because the Indians stole every thing made of iron within their reach. At the latter end of the 17th century they obtained the name of the Mariana, or Marianne Islands, from the queen of Spain, Mary Ann of Austria, mother of Charles II., at whose expense missionaries were sent thither to propagate the Christian faith.

LAGO-NEGRO, or LAGONERO, a town of South Italy, prov. Potenza, on the high road from Naples to Calabria, 12 m. NE. Policastro. Pop. 5,718 in 1862. The town—situated near the lake of the same name—is well built, and has an old castle, a hospital, and several other charitable institutions, with manufactures of woollen cloth and caps, and a large weekly market.

LAGOS, a fortified sea-port town of Portugal, prov. Algarve, cap. of a comarca of its own name, 18 m. E. by N. Cape St. Vincent, and 114 m. S. by E. Lisbon. Pop. 7,100 in 1858. The town is built on the shore of a large bay sheltered N. and W. by hills covered with vines and fruit trees. The streets are narrow, and the houses generally small; but there are several handsome and regularly-built public edifices, among which are 2 parish churches, a military asylum, town hospital, and 3 convents, two of which are in the suburbs. The neighbourhood abounds in wine, figs, and other fruits, with pulse of different kinds; but, as in the rest of Algarve, there is a great scarcity of corn, which is imported from Alemtejo and the ports of Spain. The fishery of tunnies and anchovies is very considerable, and the produce, after being salted, is sent by sea to other parts of the kingdom.

LAGUNA. See TENERIFFE.

LAHORE, an independent kingdom of Hindostan. See PUNJAB.

LAHORE, a city of the Punjab, Hindostan, and, in Runjeet Singh's time, the cap. of his dominions, on the Ravee (*Hydraotes*), 230 m. NE. Delhi. Pop. estimated at 120,000. Lahore is surrounded by a brick wall about 30 ft. high, which extends for about 7 m., and is continuous with the fort. The latter, in which the rajah resides, is surrounded by a wall of no great strength, with loop-holes for musketry; a branch of the Ravee washes the foot of its N. face, but it has no moat on either of the remaining sides. The palace within this enclosure is of many stories, and entirely faced with a kind of porcelain enamel, on which processions and combats of men and animals are depicted. Several of the old buildings are in ruins; others are entire, and throw into shade the meaner structures of more recent date. Lahore is said to have been formerly 12 coss (about 19 m.) in circ. The ancient cap. extended E. to W. for 5 m., and had an average breadth of 3 m., as may be learned by the ruins. The modern city occupies the W. angle of the ancient cap. The houses are in general of brick, and 5 stories high, but many in a very crazy condition. The chief bazaar follows the direction of the city wall, and is not far distant from it. The street is narrow, and this inconvenience is aggravated by platforms in front of the shops, on which the goods are displayed under projecting pent-houses of straw to protect them from the sun and rain. Through the centre of the remaining contracted space runs a deep and dirty drain, the smell from which is very offensive. The pop. consists of Mohammedans, Hindoos, and Sikhs, the former in the greatest number. Across the Ravee, about 2 m. N. Lahore, is the 'Shah Dura,' or mausoleum of the emperor Jehangire, a monument of great beauty. 'It is a quadrangular building, with a minaret at each corner rising to the height of 70 ft. It is built chiefly of marble and red stone, which are alternately interlaid in all parts of the building. The sepulchre is of most chaste workmanship, with its inscriptions and ornaments arranged in beautiful mosaic; the shading of some roses and other flowers is even preserved by the different colours of the stone. Two lines of black letters, on a ground of white marble, announce the name and title of the 'Conqueror of the World,' Jehangire; and about a hundred different words in Arabic and Persian, with the signal signification of God, are distributed on different parts of the sepulchre. The floor of the building is also mosaic. It is probable that this beautiful monument will soon be washed into the Ravee, which is capricious in its course near Lahore, and has lately overwhelmed a portion of the garden wall that environs the tomb.' (Burnes' Bokhara, i. 137.) The Shalimar, or garden of Shah Jehan, is another magnificent remnant of Mogul grandeur. It is about ½ m. in length, and has 3 terraces, each rising above the other. A canal, brought from a great distance, intersects it, and throws up numerous fountains to cool the atmosphere. Runjeet Singh removed some of its marble houses, and replaced them by others of stone. The bazaars of Lahore do not exhibit much appearance of wealth; the commerce of the Punjab is centred at Umritzir.

Lahore was captured by Sultan Baber in 1520, and was for some time the seat of the Mogul government in India. It was for a while in the possession of the Affghans, and was repeatedly sacked by Shah Zemaun, ex-king of Caubul.

LALAND or LAALAND, an island of the Danish archipelago, in the Baltic, between lat. 54° 38′ and 54° 58′ N., and long. 11° 53′ E.; forming, with Falster, from which it is separated by the narrow but now navigable channel of Guldborg, a prov. of the kingdom. Length, E. to W., 35 m.; average breadth about 13 m. Area, 460 sq. m. Pop. 60,971 in 1860. The island is low, and is in parts liable to inundations; its shores are much indented by the sea, and it has some considerable bays. In its centre is the lake of Marieböe, 5 m. in length by 2 in breadth. The climate is said to be unhealthy; but the soil is very fertile, and it is looked upon as the most productive of the Danish islands. Principal crops, wheat, rye, barley, and oats. Hemp and hops are also produced, and great quantities or apples. Oak and other kinds of timber abound. Mineral products and manufactures few and insignificant. Laland has an active trade in agricultural produce, the chief seat of which is Nakshow, the cap., a town of 2,200 inhab., on the W. coast.

LALITA-PATAN, a considerable town of Ne-

Digitized by Google

paul, N. Hindostan, about 1½ m. S. Catmandoo, with an estimated pop. of 24,000. It is said to be a handsomer town than Catmandoo, and to possess some fine public edifices.

LAMBALLE, a town of France, dép. Côtes-du-Nord, cap. cant., on the declivity of a hill, beneath which runs the railway from Paris to Brest, 12 m. ESE., St. Brieuc. Pop. 4,256 in 1861. The town is well built, has an industrious and thriving pop., is surrounded by old walls, and has two suburbs, a communal college, public library, with manufactures of woollens, linens, parchment, and leather; and a considerable trade in agricultural produse.

LAMEGO, a city of Portugal, prov. Beira, and cap. of a comarca of its own name, near the left bank of the Douro, 44 m. E. Oporto, and 192 m. NNE. Lisbon. Pop. 10,170 in 1858. The town stands at the foot of the Sierra de Penide (an offset of the Sierra Estrella), on the little river Balsamone, just before its junction with the Douro, and is divided into three quarters, two of which are occupied by the cathedral and bishop's palace, while the third comprises the square, and a long street crossed by others of smaller size. A cathedral of Gothic architecture, built by order of Don Henrique, the father of the first king of Portugal, 4 convents, and a hospital, are the chief public establishments. The marshy lands, near the town, are very rich, producing an abundance of fine wines and delicious fruits; but these advantages are more than countervailed by the badness of the roads, which makes communication with Oporto and other places all but impossible.

LAMPEDUSA, LAMPION, and LINOSA; three islands in the Mediterranean, collectively called the Pelagian Isles, belonging to Italy, between lat. 35° 30′ and 36° N., and long. 12° and 13° E., about midway between Malta and the shore of Tunis. Lampedusa, the an. *Lopadusa*, by far the largest, is about 13½ m. in circuit. Its shores are precipitous, but it has a tolerable harbour on its S. side. Its surface is level; the E. extremity has been cultivated by an English speculator; the W. end of the isl. is covered with dwarf olive trees and other wood, much of which is cut for fuel, and sent to Malta and Tripoli. Both Lampion and Linosa are uninhabited, except by rabbits and goats; the former island has, however, some interesting traces of ancient buildings; the latter presents distinct marks of volcanic origin.

LANARKSHIRE, or CLYDESDALE, an inland co. of Scotland, having N. the cos. of Dumbarton and Stirling; E. West Lothian, Mid Lothian, and Peebles; S. Dumfries; and W. Ayr and Renfrew. It extends from Queensberry Hill, on the borders of Dumfries-shire, to near Renfrew, a distance of 55 m., comprising nearly the whole country drained by the Clyde (which see) and its tributaries, the Douglas, Avon, N. and S. Calder. Area, 987 sq. m., or 631,719 acres, of which from a third to a half are supposed to be arable. It is divided into three wards, each of which is characterised by peculiarities of surface, soil, and climate. The *upper ward*, of which Lanark is the principal town, includes nearly two-thirds of the co., comprising the district bounded by Peebles on the E., Dumfries on the S., and Ayr on the W. This district consists for the most part of mountains, hills, and wide dreary moors; the only cultivable land lying along the banks of the Clyde and Douglas. Some of the mountains in this ward have an elevation of above 2,300 ft. The *middle ward*, having Hamilton in its centre, has a comparatively level surface, the low grounds along the Clyde extending to a much greater distance, and the hills by which they are bounded on either side being of very inferior altitude. The *lower ward*, though of small dimensions as compared with either of the others, is the most fertile and best cultivated; and, having the city of Glasgow within its limits, it is by far the most populous, important, and wealthy of the three. The climate in the upper ward is often very severe; in the middle and lower ward it is comparatively mild and humid, especially in the latter. The soil of the middle and lower wards is principally a retentive clay, but in parts it is loamy, sandy, and gravelly. Agriculture, though formerly backward, has of late been greatly improved: drainage, which is here quite essential, is now prosecuted with the greatest vigour, and bone dust is extensively employed in the raising of turnips. The draught horses of this co. have long enjoyed the highest reputation of any in Scotland. Ayrshire cows are generally introduced, and a good deal of cheese is made in imitation of Dunlop. There are several valuable orchards in what is called the *trough* of the Clyde, between the mouth of the S. Calder and the lowest waterfall. Farm houses and offices rank with those in the best improved districts. Property mostly in very large estates; farms of all sizes, and let generally on leases for 19 years. The minerals of this co., particularly its iron and coal, are of the highest importance. The command of cheap and abundant supplies of the latter has been the principal cause of the extraordinary progress made by Glasgow in manufacturing industry; and, more recently, the command of coal, added to the discovery of the peculiarly valuable carboniferous iron-stone (provincially *black-band*), have made Lanarkshire one of the principal seats of the British iron trade. The principal iron works are those of Gartsherrie, Dundyvan, Monkland, Summerlee, and Calder. Lead is also rather extensively produced at Leadhills in this co. The manufactures and commerce are of the highest importance, and principally concentrated at Glasgow. Each of the three wards into which this co. is divided has a sheriff substitute to superintend its judicial affairs. The Forth and Clyde canal is partly, and the Monkland canal wholly, in the co., and it has also numerous lines of railways. It is divided into 47 pars., and sends 3 members to the H. of C., 1 being for the co. and 2 for the city of Glasgow; the bors. of Lanark, Airdrie, and Hamilton unite with Linlithgow and Falkirk in returning a mem. Registered electors for the co. 5,184 in 1865. At the census of 1861, the co. had 46,675 inhab. houses and 631,566 inhabitants, while in 1841 Lanarkshire had 81,458 inhab. houses; and 426,972 inhab. The old valued rent was 13,511*l.*, while the new valuation for 1863–64 was 1,153,338*l.*, inclusive of railways and canals.

LANARK, a royal and parl. bor. and market town of Scotland, co. Lanark, of which it is the cap., on an elevated plateau, 1½ m. from the Clyde, 30 m. SW. Edinburgh, and 23 m. SE. by E. of Glasgow, on the Caledonian railway. Pop. 5,384 in 1861, against 4,467 in 1841. The town consists of one leading street in the direction of E. and W., with several subsidiary streets and lanes. The streets are well-paved, but many of the houses are mean, being thatched with broom, heath, or straw, and exhibiting strong marks of poverty or decay; but the older buildings are gradually being superseded by new and better edifices. The only public buildings are the county hall, including a gaol, the par. church, a free church, two chapels belonging to the Relief, and one to the Associate Synod. Various sums have been bequeathed, at different times, for the pro-

Digitized by Google

motion of education. Twenty-eight boys are supported at the grammar-school; and, in addition to the school fees being paid, each gets an annual sum, varying from 2*l.* to 3*l.* There is, besides, a charity school for 50 children. The chief manufactures are weaving and lace embroidery. Wm. Lithgow, the traveller, and Gavin Hamilton, the historical painter, were natives of the bor.; and General Roy, the celebrated engineer, and author of 'The Military Antiquities of the Romans in Britain,' was educated at the grammar-school. Corp. rev. 1,084*l.* in 1863–4.

Lanark and its vicinity have many remains of antiquities. The Castle Hill, on the S. of the town, was once the site of a royal residence; but every trace of it has disappeared. The old church, the date of which is unknown, and St. Nicholas's chapel, have been allowed to go to ruins. There are, in the neighbourhood, distinct vestiges of two Roman camps, supposed to have been the work of Agricola: one of them measures 600 yds. in length, and 420 in breadth. The bor. seems to have been more important in ancient than in modern times. In 978 Kenneth II. held in it an assembly of the states of the realm. It was a royal bor. as early as the 12th century. Lanark was the scene of the first military exploit of Sir William Wallace. During his residence here, after his marriage with the co-heiress of Leamington, he killed, in 1298, Hazelrigg, the English sheriff, and expelled his soldiers from the town. This bor. formerly had the custody of the standard weights of Scotland: they are still preserved; but the act of 1826, introducing the imperial standard, has superseded their use.

Lanark unites with Falkirk, Linlithgow, Airdrie, and Hamilton in sending a mem. to the H. of C. Registered voters 232 in 1865. The Falls of Clyde are in the near vicinity of the town; Bonnington Linn, 30 ft.; Corra Linn, 120 ft.; and Stonebyres, 84 ft.: the two former are to the E.; the latter to the W. of the town. Another remarkable object is the Cartland Crags, a deep chasm formed by the Mouse, a small tributary of the Clyde, over which a bridge of three arches was thrown in 1825.

Lanark (New), a manufacturing village of Scotland, co. Lanark, on the bank of the Clyde, close to the river, and bounded on the N. by steep and beautifully wooded hills, 1 m. S. of the bor. of Lanark. Pop. 1,396 in 1861. The village consists of a series of cotton mills and of two streets, in which the work-people live; and so little space intervenes between the river and the hills, that there is room for only two lines of edifices. The mills were founded, in 1784, by Mr. David Dale; and Arkwright, the father of the cotton manufacture, was for a while a partner in them. (Baines' Hist. of the Cotton Manufacture, p. 193.) Mr. Dale was afterwards succeeded by his son-in-law, Robert Owen, whose attempts (first made at New Lanark) to reduce to practice his projects for the renovation of society, are well known. Owen ceased, in 1827, to have any interest in the business. The mills give employment to above 1,000 individuals, of whom nearly 400 are under 18 years of age. The hours of labour are limited to 10½ a day throughout the year, and the people are peculiarly respectable. A school is established in the works, for the education of the children, and is attended by about 500 pupils. It may be mentioned that teaching by objects, and what is called the *intellectual* system of education, was originally practised at the mills of New Lanark, about the beginning of the century.

Lancashire, or Lancaster, a marit. co. of England, on its W. coast, having N. Cumberland and Westmoreland, E. Yorkshire, S. Derbyshire and Cheshire, and W. the Irish Sea, by which it is in various parts deeply indented. Its most northerly portion, consisting of the hundred of Furness, is separated from the main body of the co. by the intervention of Morecambe Bay and a small portion of Westmoreland. Area, 1,905 sq. m., or 1,219,221 acres, of which about 850,000 are supposed to be arable, meadow, and pasture. The hundred of Furness is generally rugged and mountainous; and the E. parts of the county along the Yorkshire border are occupied by portions of, or offsets from, the great central or inner range of English mountains; but, with these exceptions, the country is generally flat; and in the S. part of the co. an extensive plain stretches from Formby Point and Liverpool on the W., to Oldham on the E. Sandy loam and sand are the prevailing soils in the lower districts, in which, however, there are several extensive mosses: peat soil prevails in the moors. The climate is mild and salubrious, but more humid than any other in England. The co. is wholly indebted to manufactures and commerce for its vast population, wealth, and importance; for, as respects agriculture, it is, though considerably improved, one of the most backward in the empire. There is a great want of drainage. Potatoes are more extensively cultivated in this than in any other English co.; and this is one cause why few turnips are raised. Grazing is more attended to than tillage husbandry; large quantities of hay are produced, and there is a good deal of dairying. Lancashire is believed to be the original seat of the long-horned breed of cattle; but they are now so crossed and intermixed with others, as to be seldom found pure. There are some large estates; but property is, notwithstanding, a good deal subdivided. Tillage farms for the most part rather small, and usually held on seven years' leases, a tenure too short to admit of the occupiers undertaking any very expensive improvements. Farm buildings generally good. Exclusive of other minerals, this co. has vast beds of coal, and to that, more perhaps than any thing else, its extraordinary progress in manufactures is to be ascribed. It is the grand seat of the cotton manufacture, which has grown up with a rapidity wholly unexampled in the history of industry. Manchester, Preston, Bolton, Oldham, Blackburn, Ashton, Bury, Chorley, Wigan, and other towns, where the manufacture is principally carried on, and Liverpool, the grand emporium of the trade of the county, have increased with equal rapidity. Manchester is now the first manufacturing town in the world; and the trade and navigation of Liverpool are inferior only to those of London. Besides that of cotton the woollen manufacture is extensively carried on at Rochdale and other places in this co., as is that of silk, flax, paper, hats, and many other branches of industry. The extension of manufactures and trade has been at once a cause and a consequence of the extension of the facilities for conveyance, by means of canals, railways, and ordinary roads, which traverse this co. in every direction, and bring it, as it were, into immediate communication with almost every other part of the empire. Lancashire was the first co. to construct a navigable canal (the Duke of Bridgewater's); and the opening of the Manchester and Liverpool railway, with locomotive engines, in 1830, formed a new and most important æra in the history of internal communication. Lancashire is a co. palatine, and contains 7 hundreds, 4 boroughs, and 70 parishes, many of which are very extensive. It sends 26 mems. to the H. of C., being 4 for the co., 2 each for the bors. of Manchester, Liverpool, Oldham,

Digitized by Google

Bolton, Preston, Lancaster, Wigan, and Blackburn, and 1 each for Rochdale, Bury, Clitheroe, Ashton, Salford, and Warrington. Registered electors for co. 34,561 in 1865, being 13,006 for North Lancashire, and 21,555 for South Lancashire. At the census of 1861, the co. had 438,503 inhab. houses, with 2,465,366 inhabitants, while in 1841 Lancashire had 289,184 inhab. houses, and 1,667,054 inhab. The gross annual value of real property assessed to income-tax under schedule (A.) amounted, in 1862, to 1,836,639*l.* in the northern division, and to 2,967,159*l.* in the southern division.

LANCASTER, a mun. and parl. bor. and sea-port town and par. of England, cap. of the above co., locally situated in hunds. Amounderness and Lonsdale, but with separate jurisdiction, on the S. bank of the Lune, 46 m. N. by E. Liverpool, and 232 m. NW. London by London and North Western railway. Pop. of municipal bor. 14,487, and of parl. bor. 16,005 in 1861. The town stands on a gentle slope facing the Lune, which is crossed here by a handsome stone bridge of five arches; and the summit of the hill is crowned by the bastions of its fine old castle, and the lofty tower of the par. church. Nearly the whole town is built of freestone, from quarries in the neighbourhood: the houses are generally well constructed, and many are large and handsome. The streets however, with one or two exceptions, are inconveniently narrow, and badly paved. Lancaster is lighted with gas, under an act passed in 1824, and is well supplied with water from springs and wells. The principal public building is the castle, once a magnificent structure, originally built in the eleventh century, but renovated by John of Gaunt, duke of Lancaster, during the reign of Edward III. It was repaired at the end of the sixteenth century, and much enlarged in 1788, when it was converted, at an expense of 140,000*l.*, into assize and county courts, gaol, and female penitentiary. The walls enclose an area of 10,525 sq. yards. The prison is conducted on the system of classification and silent labour: above 160 debtors and 200 criminals have been confined in it at an average of the last few years. Among the other public buildings, exclusive of the churches, are the town-hall, erected in 1781, the custom-house, on St. George's Quay, having a portico and pediment supported by four Ionic columns, the assize house, the assembly-room, the theatre, the public baths, and the market-houses. The county lunatic asylum, on Lancaster Moor, is a quadrangular building, with a handsome Doric front, occupying, with its grounds, about 5 acres: it accommodates 550 patients, and is said to be humanely and judiciously conducted. The par. church, which stands on the green and shapely knoll of Castle hill, is of the same date as the castle, and consists of a central and two side aisles of equal length, terminated by a well-proportioned and lofty tower at its W. end: it was all but rebuilt in 1759. Its richly-carved stalls, and other curious carvings in the chancel, and its fine monuments, are universally admired. The living is a vicarage, of the clear annual value of 1,700*l.*; and the incumbent nominates the ministers of St. John's and St. Ann's, the two district churches, as well as those of all the chapelries within the par. There are also places of worship for R. Catholics, Presbyterians, Independents, Quakers, and Wesleyan and Association Methodists, to each of which, as well as to the churches, Sunday schools are attached, furnishing religious instruction to about 2,000 children. The school charities comprise an ancient grammar school, under two masters, greatly modified in 1824, and now furnishing a good classical and general education to about 60 boys; a boys' national school, united with an old Bluecoat charity, attended by 360 boys (30 of whom are clothed); a girls' national school, established in 1820, and attended by 130 girls; a charity school, for clothing and instructing 60 girls; a Catholic charity school, attended by 90 children of both sexes; and a Lancastrian school, with 200 children. Among the other public charities are Mrs. Ripley's hospital for 300 children, founded in 1853, with a building in the Gothic style; Penny's hospital, endowed with land worth 340*l.* a year, and affording a residence, clothing, and small stipend to twelve poor men; Gillison's hospital, for the reception of eight unmarried women, each of whom has a stipend of 4*l.* a year; Gardyner's almshouses, for four old men, a dispensary, and house of recovery; a lying-in charity, and a benevolent society. Bible, church missionary, and tract societies are also well supported.

Lancaster had formerly a considerable share in the trade with the W. Indies; for it appears that, in 1799, there came 57 vessels, of the burden of 12,820 tons, from the W. Indies only. In consequence, however, of the superior facilities enjoyed by Liverpool, this branch of commerce is now all but extinct. The great bulk of the shipping belonging to the port consists of coasters. On the 1st of January, 1864, there were registered 35 sailing vessels under 50, and 113 above 50, tons; besides 4 steamers under, and 6 steamers above, 50 tons. The navigation of the Lune being obstructed by shallows, vessels of above 200 tons load and unload in Glasson dock, constructed in 1787, about 5 m. below the town, to and from which their cargoes are conveyed by means of lighters. Gross customs' revenue, 17,019*l.* in the year 1863. The manufactures of Lancaster comprise cotton fabrics, silk thread, linen thread, and sail-cloth. The cotton trade, introduced in 1806, is in a thriving condition; but the sail-cloth business has declined. Cabinet-work and upholstery are made in considerable quantities for exportation, and there are candle and soap establishments and two extensive ship-yards. The Lancaster canal skirts the town, and about ½ m. to the NE. it crosses the Lune by a noble aqueduct bridge of five arches, erected by Rennie at a cost of 48,000*l.* The Lancaster and Preston junction-railway, forming a portion of the Great North Western line, intersects the town.

Lancaster is one of the most ancient of the English bors., its first charter having been granted by King John, and confirmed by subsequent monarchs. The present mun. bor. is divided into three wards, and governed by six aldermen (one of whom is mayor) and eighteen councillors: it has a commission of the peace under a recorder. Corporation revenue, 2,027 in 1863. Assizes are held in Lent and summer, and the quarter sessions on Jan. 4, April 5, June 28, and Oct. 19. A bor. court sits every fourth Thursday for the recovery of debts *to any amount* incurred within the bor.; and it is the seat of a county court. The right to send representatives to parliament was first exercised in 1293 (23 Edward I.), but it ceased in 1359, and was not resumed till 1547, since which Lancaster has regularly sent two mems. to the H. of C. Previously to the Reform Act, the right of election was vested in the freemen and inhabs. The limits of the old parl. bor. were extended by the Boundary Act, so as to include parts of the townships of Skerton and Bulk. Registered electors, 1,394 in 1865. Lancaster has two weekly markets on Wednesday and Saturday, but chiefly on the latter; and fairs are held 1st May, 5th July, and 10th October, for cattle and cheese.

Lancaster is supposed to have been a Roman station. Urns, altars, and other antiquities have

Digitized by Google

been discovered, and the affix *caester* given by the Saxons, serves to confirm the fact. The Normans found the town in a state of decay; the ancient city reduced to a village, and the Roman castrum little better than a ruin. It was given by William the Conqueror to Roger de Poictou, who built a castle on the site of the ruined castrum: a flourishing town soon gathered round; the burgesses of Lancaster acquired extensive privileges from their lords, and it continued to increase in importance. King John conferred 'the honour of Lancaster' on his favourite Gilbert Fitz-Reinfrede, and gave it a charter. The first earl of Lancaster was created in 1266; and, in 1351, Henry earl of Derby was advanced, by special charter, to the title and dignity of duke of Lancaster, with power to have a chancery in the county, and 'to enjoy all other liberties and regalities belonging to a count palatine.' John of Gaunt, fourth son of Edward III., married Blanche, the duke's daughter, and, by virtue of this alliance, succeeded to the title. His son, Henry of Bolingbroke, first earl of Derby, and afterwards duke of Hereford, became duke of Lancaster on his father's death in 1398, and finally king of England in 1399, from which time to the present this duchy has been associated with the regal dignity. Lancaster espoused the royalist cause during the parliamentary war, and was visited by the Jacobite troops in the rebellions of 1715 and 1745.

LANCASTER, a town of the U. States of N America, Pennsylvania, cap. co. of its own name, near Conestoga Creek, a tributary of the Susquehanna, 56 m. W. by N. Philadelphia, on the railway from Philadelphia to New York. Pop. 17,623 in 1860, against 8,417 in 1840. The town is pleasant, healthy, and flourishing, in a fertile and highly cultivated vicinity. Its streets are regular; the houses are chiefly of brick and stone, and many are spacious and elegant. There are numerous places of public worship, 8 of which for Germans; a courthouse, gaol, 3 banks, several charitable and religious societies, an academy for the classics and English literature; a school of mutual instruction, and several other schools. The pop. is mostly of German descent; and some of the newspapers are in the German language. Lancaster has been long famous for its manufacture of rifle muskets, and the excellence of the stage coaches built in it. Latterly several large cotton factories have been erected. Exclusive of cotton it has also manufactures of saddlery, hats, nails, hand-screws, and other tools; and many breweries, distilleries, tanneries, and potteries. Its general trade is extensive: it is connected with Philadelphia and Harrisburg by railroads, and with the Susquehanna below Colombia by a canal. It is the seat of the district judicial court for the S. division of the county.

LANCIANO, a town of South Italy, prov. Chieti, cap. dist. and cant., or *circondario*, 6 m. from the Adriatic, and 18 m. S. Pescara. Pop. 16,620 in 1862. The town is built on the summit of three hills, in a healthy and pleasant situation; and has a cathedral, several churches and convents, an archbishop's palace, a diocesan seminary, and other schools, and a tribunal of primary jurisdiction. This is a very ancient city; and, in the middle ages, it was distinguished by its proficiency in manufactures, and by the extent of the commerce carried on at its fairs; but these have both greatly declined.

LANDAFF, or LLANDAFF (*Llan-Tâf*, church of the Tâf), a town and par. of S. Wales, co. Glamorgan, hund. Kibber, on the W. bank of the Tâf, 2 m. NW. Cardiff, and 27 m. W. Bristol, on the Taff Vale railway. Pop. of par. 6,585 in 1861; area of par., 2,386 acres. Landaff is at present little more than an inconsiderable village, with about a dozen respectable residences and several cottages; nor would it be worth notice, except from its being a bishop's see, and containing a handsome cathedral. This sacred edifice was built early in the 12th century on the site of one still more ancient; but its W. end, with its fine front, and rich Norman doorways, and elegant pinnacled towers, has been allowed to fall into decay. The cathedral now comprises a choir, short nave and transepts: its total length, from E. to W., including the Ladye-chapel behind the altar, is 263 ft., breadth of the body 65 ft., and height, from the floor to the centre of the roof, 119 ft. Very extensive repairs, but in very bad taste, were effected in 1751, at an expense of 7,000*l.* The new front, built about 80 ft. within the original Norman W. end, has a Venetian window, Ionic pilasters, and flower-pot jars on the parapet; and till lately the fine Gothic altar was enclosed within a Grecian portico. The chapter-house, S. of the church, is in the decorated English style, with a central pillar; but it is fast falling into the same ruinous condition as the monuments and the episcopal palace, which were defaced and all but destroyed by Owen Glendwr. The choral services have been disused for some years, and the building is now employed as a parish church, the service being occasionally in the Welsh language. The see of Llandaff (created in the 6th century) comprises all the county in which it is situated, and Monmouthshire, except 7 pars. It was formerly the poorest of all the English bishoprics, the annual income, including preferments, at an average of the 3 years ending with 1831, being only 924*l.*; and it was held for some time *in commendam* with the deanery of St. Paul's, London, and the rectory of Bedwas. Since the last voidance of the see, however, the sum of 3150*l.* has been paid out of the episcopal augmentation fund, to raise the income to 4,200*l.*, and a further allowance of 300*l.* is to be made till the residence be restored. The patronage of the see comprises the cathedral appointments with 8 livings, and the chapter comprises 11 dignitaries, besides the bishop: there are also 2 vicars-choral. Llandaff has no market, and is wholly dependent for its supplies on Cardiff, except for vegetables, which it sends in considerable quantities to that market. Cattle fairs, Feb. 9 and Whit-Monday.

LANDAU, a strongly fortified town belonging to the German confederation, in Rhenish Bavaria, on the Queich, a tributary of the Rhine, 54 m. S. by W. Mayence, and 46 m. NNE. Strasburg. Pop., according to Berghaus, 6,100, exclusive of the Bavarian garrison of 6,000 men. This fortress is considered a *chef-d'œuvre* of Vauban, who commenced the construction of its works in 1680. It is an octagon, with seven bastions, as many demi-lunettes, and several other outworks: its ditches are filled from the Queich. The barracks and magazine are bomb-proof. The town was almost entirely consumed by fire in 1686, since which it has been regularly laid out, and has some good public edifices, including the principal church with a lofty tower, two convents, the town-hall, court of justice, and a civil and military hospital. In the centre of the town is a spacious parade ground. Some extensive vinegar factories have been established here within the last few years. The gates are closed at an early hour, after which, neither ingress nor egress is permitted.

The history of Landau is little else than that of a succession of sieges, blockades, captures, and other military events. It was founded by the

Digitized by Google

Emperor Rodolph of Hapsburg, and made a free town of the empire in the 14th century. During the 30 years' war it was repeatedly taken and retaken by the Swedes, Imperialists, French, &c., and in the 18th century it was many times taken or besieged by the French and Germans. It was generally held by the French from the peace of Nimeguen, in 1680 to 1815, when it was restored to Germany by the second treaty of Paris.

LANDERNEAU, a town and river-port of France, dép. Finistère, on the Elorn, 12 m. ENE. Brest, on the railway from Brest to St. Brieux. Pop. 6,959 in 1861. The town is ill-built, and badly paved; but its quays are good, and its port admits vessels of from 300 to 400 tons. It has a large and fine marine hospital, formerly an Ursuline convent, and considerable manufactures of linen cloth and leather.

LANDES, a dép. of France, and one of the largest, though the poorest, in the kingdom, reg. SW., chiefly between lat. 43° 30′ and 44° 30′ N., and long. 0° 7′ and 1° 32′ W., having N. Gironde, E. Lot-et-Garonne and Gers, S. Basses Pyrenées, and W. the Bay of Biscay. Length and greatest breadth about 70 m. each. Area, 932,131 hectares; pop. 300,839 in 1861. The dép. derives its name from an extensive tract of heath, marsh, and other waste land, with a loose sandy soil, about 300 ft. above the level of the sea, termed the 'Landes,' which occupies 731,142 hect., or nearly 4-5ths of its total surface, besides a considerable portion of the adjacent dép. of the Gironde. This extensive and almost desert plain is for the most part a dead flat, interspersed with patches of pasture or cultivated land, clumps of pines, scattered habitations of a miserable kind, and a few wretched hamlets; and bounded towards the sea by a chain of *dunes* or sandy dowds, inside which is a succession of lagoons frequently communicating with each other, and occasionally with the sea by openings between the *dunes*. The *dunes* extend along the shore nearly from the mouth of the Gironde to the Pyrenees, forming a chain from 140 to 150 m. in length, by about 5 m. in width and from 100 to 150 ft. in height. They consist of loose shifting sand thrown up by the sea. They are continually changing in form and position, according to the prevalent winds; but have a general tendency to move easterly, in which direction they are said to advance about 25 yards a year; and in process of time they would infallibly overspread the whole country, unless arrested and fixed by planting them with pines or other trees, as is done in Holland. Occasionally immense masses of sand have shifted their position through the agency of tempests, as in the African and Arabian deserts. The church and a considerable part of the village of Mimizan was overwhelmed by an inundation of this sort. The increase of the *dunes* having prevented the egress into the sea of many small rivulets, the lagoons have been formed, the largest of which is 7 m. in length and about as many in width. These also continue to extend, since the shifting sands have been gradually shallowing the channels by which they communicate with the sea. The surface of the 'Landes' is usually parched and arid, except for about four months of the year, when the rains form extensive pools in its depressed portions, varying to the depth of several feet. These are often covered with sand carried over them by the wind, when they are called *blouses*, and are exceedingly dangerous to strangers. To avoid such dangers, and to travel more speedily through the loose soil, the inhab. use long staffs having notches for the feet 1, 2, or 3 ft. above their lower extremity; so that a person of ordinary stature, when in walking order, has at a distance the appearance of a giant 8 ft. high. The inhab. are very expert at the use of these singular helps to locomotion. The Adour, and its tributary the Midouze; bound the 'Landes' to the SE., and form the N. limit of the fertile portion of this dép. The soil is there light, but productive. Maize, millet, wheat, rye, saffron, hemp, and flax, are grown: in the arrond. St. Sever, about 250,000 kilog. of linseed-oil are produced annually, and about 320,000 hectol. of wine, certain kinds of which, termed the *vins de sables*, rival some of the growths of the Gironde. The culture of the mulberry is on the increase.

Agriculture in the Landes was in an exceedingly backward state till the year 1857, when, on the initiative of the Emperor Napoleon III., the French legislative assembly voted considerable sums for the drainage and general improvement of the soil. Since then, immense districts, which formerly were not only entirely unproductive, but frequently engendered disease, have been brought under cultivation. The work still continues, to the same good effect. Goats, hogs, and poultry are frequently kept by the peasantry, and bees are numerous. The pine forests furnish abundance of deals, pitch, tar, and rosin; and coal, iron ore, and potters' clay are met with. Manufactures unimportant; some smelting furnaces and forges, employing about 500 hands, and some tanneries, oil-mills, and glass and earthenware factories, comprise almost all the manufacturing establishments. The trade of the dép. is chiefly in cattle, wines, timber, and agricultural produce. Landes is divided into 3 arronds., and sends 3 mems. to the cham. of dep. Chief towns, Mont-de-Marsan, the cap., St. Sever, and Dax.

LANDSBERG, a town of Prussia, prov. Brandenburg, gov. Frankfort, cap. circ., on the Warta, a tributary of the Netz, here crossed by an excellent bridge, 38 m. NE. Frankfort on the Oder, on the railway from Berlin to Königsberg. Pop. 76,131 in 1861. Landsberg is divided into the Old and New Town, and has several suburbs. It is walled, and is one of the best built towns in the prov. It has several churches, a house of correction, the inmates of which are made to support themselves by the manufacture of woollen cloths, a hospital, an orphan asylum, and a high school. It is a principal mart for corn and wool, the greater part of the produce of Pomerania, the Neumark, and W. Prussia being brought thither for export by the Oder. The town has also brisk manufactures of woollen goods, leather and paper, and numerous breweries and distilleries. Landsberg is the seat of a circle assembly, a circle and town tribunal of the first class, boards of taxation, forest economy, and agriculture, and the superintendency of the drainage of the vale of the Warta. The town was repeatedly taken and retaken by the Swedes and the Imperialists in the 30 years' war.

LANDSCRONA, a fortified sea-port town of Sweden, prov. Malmæ, on a tongue of land projecting into the Sound, 16 m. NE. Copenhagen. Pop. 6,276 in 1861. The town has strong walls, a citadel, and other works; is well laid out, and has a safe and well sheltered harbour, with 20 ft. water.

LAND'S END, a headland at the W. extremity of the co. Cornwall, celebrated as being the most westerly land in England; lat. 50° 4′ 8″ N., long. 5° 41′ 31″ W. It is formed of granite cliffs, which rise about 60 ft. above the level of the sea. These assume, in some places, the appearance of shafts, and are as regular as if they had been cut by the chisel. About 1 m. W. from the Land's End are the rocks called the Longships, on the largest of which is a light-house, with a fixed light, having the lantern elevated 88 ft. above high water mark.

Digitized by Google

LANDSHUT, a town of Bavaria, circ. Lower Bavaria, on the Isar, 38 m. NE. Münich, on the railway from Münich to Ratisbon. Pop. 12,134 in 1861. Landshut is divided into an old and a new town, has a suburb on an island in the Isar, with which it is united by two bridges, and is partly surrounded by old walls and ditches. It consists of two principal and many smaller streets; the houses, which are of brick, are mostly environed by gardens. The town has a very picturesque appearance, from the antique architecture of its buildings, and the number of its towers and spires, that of St. Martin's church being one of the loftiest in Germany. It has an old castle, the residence of the dukes of Bavaria in the 13th century; a Cistercian abbey, in which they were buried; a royal palace, an old town-hall, a hospital for decayed citizens, 2 other hospitals, 3 convents, a lyceum, gymnasium, chirurgical and ecclesiastical seminaries, and various other schools. In 1800, the university of Ingolstadt was removed thither; but in 1826 it was transferred to Münich. Landshut has manufactures of woollen cloths, stockings, tobacco, paper, and cards, with numerous distilleries and breweries, and some trade in corn, cattle, and wool.

LANE-END. See POTTERIES.

LANGELAND, an island of the Danish archipelago, in the Baltic, between Laland and Funen, extending from lat. 54° 43′ to 55° 20′ N., and between long. 10° 40′ and 11° E. Length NNE. to SSW. 32 m.; average breadth 2½ m. Area, 80 sq. m. Pop. 17,105 in 1860. Its shores are generally uniform, except on the W., where they are broken by numerous inlets. Its surface is more elevated than that of the adjacent islands, but it is generally quite flat. Climate healthy. Chief products, corn, potatoes, fruits, and flax. A good many cattle are reared, and the fisheries are productive. Rudkiöbing, on the W. coast, with 1,580 inhab., is the chief town, and centre of the trade, which is tolerably active.

LANGENSALZA, a town of Prussia, gov. Erfurt, cap. circ. of its own name, on the Salza, 19½ m. NW. Erfurt. Pop. 8,672 in 1861. The town is well built, walled, and further defended by a castle; and has 4 churches, 4 hospitals, a lazaretto, an orphan asylum, a high school, a public library, and a theatre. It is the seat of a district council, a board of taxation, judicial courts for the town and circle, and the Thuringian Agronomical Society. It has manufactures of various descriptions of woollen, linen, and cotton fabrics, a saltpetre factory, with dyeing houses, breweries, distilleries, and paper mills.

LANGHOLM, a bor. of barony and market-town of Scotland, co. Dumfries, in the bosom of a wooded valley on the Esk, and on the railway between Edinburgh and Carlisle, 21½ m. N. by W. the latter, and 59 m. S. by E. the former. Pop. 2,990 in 1861. The town is intersected by the Esk, New Langholm (founded in 1778) being on the W. side of the river. The latter is regularly built, of a triangular form. The old town consists chiefly of one street on the line of the road. In it are the town-hall and gaol, ornamented with a spire, and the par. church. There are, also, chapels belonging respectively to the Associate Synod and Relief. The communication between the different parts of the bor. is maintained by a fine bridge. There are sundry schools in the parish, of which two are endowed; average attendance, about one-tenth pop. There are two subscription libraries, to one of which the late Thomas Telford, the celebrated engineer, a native of the district, bequeathed 1,000*l.* William Julius Mickle, the translator of the 'Lusiad,' was a native of the bor.; and Sir John and Sir Pulteney Malcolm were born in the neighbourhood.

Langholm was created a burgh of barony in 1610. Gilnockie Tower, the residence of 'Johnie Armstrong,' the famous border freebooter in the time of James V., is in the neighbourhood, but has long been in ruins. Langholm Lodge, a seat of the Duke of Buccleugh, is also in the neighbourhood.

LANGRES (an. *Andematunum* and *Civitas Lingonum*), a town of France, dép. Haute-Marne, cap. of arrond., 18 m. SSE. Chaumont, and 39 m. NNE. Dijon, on the railway from Paris to Mulhouse. Pop. 7,940 in 1861. The town is surrounded with walls flanked by towers, and is well built, its streets being regular, wide, and clean. The principal public edifice of Langres, its ancient cathedral, has a choir, the peristyle of which, of the Corinthian order, is supposed to have formed part of a Roman temple: the edifice itself, though of uncertain date, is very ancient, excepting the grand entrance, constructed in the 18th century. The bishopric of Langres was founded as early as the 3rd century. Langres has a handsome town-hall, a theatre, a public library with 3,000 vols., a school of drawing, several hospitals, and a fine public promenade. It is distinguished by its cutlery, which is its chief branch of industry.

The *Lingones* are noticed by Cæsar as being attached to the Romans (De Bello Gallico, lib. i. § 26, 40); they afterwards became *fœderati*, or allies of the Romans; and their city is characterised by Frontinus as *opulentissima*. (Lib. iv. cap. 3.) Among the remains of antiquity of which it has still to boast, are several triumphal arches; one of which, now included in the town-walls, supposed to have been erected in honour of the two Gordians, *circa anno* 240, has a frieze on its entablature, indicating a high state of the arts. It suffered numerous disasters in the dark ages, being taken and burnt by Attila, and again destroyed by the Vandals, in 407. Louis VII. annexed it to the French crown. Diderot was a native of Langres, where he was born, in 1712.

LANGUEDOC, one of the old provs. of France, in the S. part of the kingdom, now distributed among the dépts. of Ardèche, Aude, Gard, Haute Garonne, Hérault, Haute-Loire, Lozère, and Tarn.

LANNION, a town and river port of France, dép. Côtes-du-Nord, cap. arrond., on the Guer, 35 m. WNW. St. Brieuc. Pop. 6,598 in 1861. Its port on the river is bordered by a spacious quay, but within the last 40 years vessels of 250 tons have been unable to come up to the latter. It has a church erected in the 12th century, two hospitals, barracks, and a communal college. It is the seat of a sub-prefecture, and a court of primary jurisdiction, and has manufactures of linen fabrics, and an active trade in agricultural produce.

LANZEROTA, one of the Canary Islands, which see.

LAODICEA AD LYCUM, an ancient city of Phrygia, in Asia Minor, chiefly interesting as being the site of one of the seven primitive Christian churches, on the Lycus, a tributary of the Meander, 120 m. ESE. Smyrna, lat. 37° 56′ N., long. 29° 15′ N. The site of this town, once ranking as the second in Phrygia, is marked only by the deserted ruins of public buildings; and hence the neighbouring hamlet, inhabited only by a few squalid Turks, has received the name of *Eski-hissar*, 'old castle.' The remains are very extensive; and the whole surface within the walls is strewed with pedestals and fragments, indicating by their size and workmanship the former luxury and magnificence of the city. The largest ruin is that of an oblong amphitheatre, having an area of 1,000 sq. ft. Many of the seats are still in tolerable

Digitized by Google

preservation, and at the W. end is a vaulted passage about 140 ft. long, and designed for the horses and chariots entering the arena. A Greek inscription on the mouldings states that it was completed in the reign of the emperor Vespasian, A.D. 82, after having occupied twelve years in building. There are remains also of an odeum, two theatres, and a fabric which Chandler supposed had been a senate-house and exchange. The soil in and about the city is hard, dry, and porous, bearing many indications of an igneous origin; and Laodicea has at many different times suffered greatly from earthquakes.

Laodicea, so called from the wife of its founder, Antiochus II., was long an inconsiderable place, notwithstanding the beneficence of Hiero, Zeno the philosopher, and his son Polemo. After its sufferings, however, in a siege by Mithridates, the Romans strengthened and enlarged it, so that at length, about the Christian era, it became, next to Apamea Cibotos, the largest city of Phrygia, and vied in importance with the cities on the coast. There can be little doubt that it was visited by St. Paul in the course of his missionary tour through Asia Minor, and perhaps the Christian converts of Laodicea, as well as those of Colosse and Hierapolis (*Pambouk*), both neighbouring towns, were the results of the apostle's preaching. In the epistle to the Colossians (iv. 16), mention is made of an epistle to the Laodiceans; and though some critics have maintained that it is identical with that to the Ephesians, the more probable conjecture is that it has not come down to modern times. The persecution which raged in Asia Minor during the latter part of the first century tended somewhat to abate the zeal of the Laodicean Christians, and hence the rebuke in the Revelations. Of the subsequent history of this city for several centuries little is known. It was generally in a prosperous condition under the Roman emperors, and was flourishing even in 1190, when Frederic Barbarossa visited it on his way to the third crusade. Soon afterwards, however, it was repeatedly attacked and ravaged by the Turks, and finally came into their hands in the beginning of the 14th century, since which it has been a mere ruin, 'wretched, and miserable, and poor, and naked.' (Rev. iii. 14–22.)

Laodicea *ad Lycum* must not be confounded with Laodicea *combusta* (now *Ladik*), 19 m. NW. Konieh, also a considerable city, of which there are extensive ruins.

LAODICEA AD MARE, in Syria. See LATAKIA.

LAON (Lat. *Landunum*), a town of France, dép. Aisne, of which it is the cap., on the summit of a steep hill, 52 m. WSW. Mezières, and 74 m. NE. Paris, on the railway from Rheims to Amiens. Pop. 10,090 in 1861. The town is about 1 m. in length, narrow in the centre, expanded at either extremity, and surrounded by old walls, flanked with numerous small towers. Except its main street, it is ill built, but it has pleasant promenades, a healthy situation, and fertile neighbourhood. It has a large Gothic cathedral, with 4 towers, rebuilt in 1114; a large old abbey, now occupied by the prefecture; a public library, comprising 17,000 vols.; extensive barracks, a remarkable leaning tower, 2 hospitals, a town-hall, communal college, and theatre. It is the seat of a tribunal of original jurisdiction; and has manufactures of nails, leather, copperas, and earthenware.

Laon has been sometimes supposed, but on no good grounds, to occupy the site of the *Bibrax* mentioned by Cæsar. In the middle ages it was distinguished by its industry and wealth; its bishopric was one of the most lucrative in the kingdom; and the position and importance of the town made it be regarded as a kind of second capital. It was, however, far more distinguished by the spirit which animated its inhabitants, and by their persevering efforts to emancipate themselves from the feudal tyranny of their bishops, and to establish a municipal government, and the regular administration of justice under magistrates of their own selection. They succeeded in establishing an independent government so early as the year 1110; and maintained it, at the cost of many great sacrifices, for above two centuries, or till 1331, when it was finally abolished by royal ordonnance. (For an account of the *commune* of Laon, see the work of M. Thierry, Lettres sur l'Histoire de France, Nos. 16–18.)

Laon was, in 1814, the scene of some severe fighting between the French and the Allies. The Prussians under Blucher having occupied the town, their position was unsuccessfully attacked on the 9th of March, by the French, under Napoleon; and the Prussians having cut to pieces and dispersed the corps of Marmont during the night, Napoleon was obliged to withdraw from before the town on the 11th.

LAOS, or the SHAN COUNTRY, a country of India beyond the Brahmaputra, extending between lat. 15° and 24° N. and long. 98° and 103° E.; having N. the Chinese prov. Yun-nan; W. the Birmese empire, from which it is separated by the Than-lweng river; S. the Tenasserim provs., Siam and Camboja; and E. Tonquin and Cochin China, from which a lofty mountain chain divides it. The country lies in the basins of two large rivers, the Menam, which afterwards waters Siam, and the Menamkong, or river of Camboja, in the middle portion of its course. The Laos territories formerly comprised eight or nine larger and several smaller distinct states; but of late the Siamese have conquered most of these, and the rest are principally tributary to the surrounding nations, especially the Birmese and Chinese. The Laos pop. in the Siamese dom. is estimated at 840,000; to which must be added nearly 200,000 for the pop. of N. Laos, making a total of somewhat more than a million. The country is fertile; but it is in general very poorly cultivated and thinly inhabited. The smaller villages are mere collections of huts; and a great part of the pop. consists of small migratory hordes, who have no permanent habitation. The labour of cultivation is thrown principally on the women. The fields are ploughed about the beginning of the rains in August, and the crop is reaped in February. The *Oryza glutinosa* is the only variety of rice that is raised; and, as there is no market for surplus grain, it sells in plentiful years at an extremely low price. The implements of husbandry are, rude ploughs, drawn by two oxen or buffaloes, harrows, spades, and hoes. The hire of a labourer averages a quarter of a rupee a day; but hired labourers are few, and the cultivators assist each other by turns in their various operations. The grain is cut with the common sickle, and thrashed by treading out with oxen. Tobacco, with sugar-canes and mulberries, are generally raised; and the country yields pepper, cardamoms, different sorts of indigo, benzoin, stick lac, and other gums, betel, numerous fruits, an abundance of teak and sapan-wood, and a species of sandal-wood. It abounds with elephants, which are exported in considerable numbers; and with buffaloes, oxen, and other animals found in the adjacent countries. There are, however, no sheep. Asses are used as beasts of burden, but waggons are frequently employed in the conveyance of goods. Gold is found in parts of N. Laos, but in such trifling

Digitized by Google

quantities as hardly to afford the ordinary low rate of wages of the country to those engaged in sifting and washing the sand in which it is found. Tin ore is abundant, and iron, lead, copper, antimony, and silver are met with. Some of these metals are smelted and wrought, but the ores are principally sent in a rough state to Birmah. Silk and cotton fabrics, paper made from the bark of a creeping plant, leather, date-sugar, and gunpowder are the chief manufactures. There are, however, gold, silver, and iron smiths, mat-makers, potters, embroiderers, and a variety of petty artisans. Spinning and weaving are usually performed by women, who, as in Birmah, conduct a good deal of the retail trade. Some commerce is carried on with the immediately adjacent countries. The inhab. exchange their lac, sapan-wood, and other dyes, paroquet skins, ivory, rhinoceros' horns, wax, tin and lead, with the Tonquinese for sulphur, cinnabar, gamboge, orpiment, borax, musk, silks, gold thread, embroidery, steel, cutlery, and paper crockery. About fifty merchants come annually from Tonquin, each with twenty or thirty horse-loads of merchandise. Large quantities of salt, with spices and woollen cloths, are imported from Rangoon, to which the Laos merchants take jaghery, drugs, dyes, silks, cottons, lacquered wares, gold, silver, copper, and other metals, partly native produce, and partly obtained from China. The intercourse with the Tenasserim provs. is increasing; and some British cotton and woollen goods are bought by the Shans at Martaban. In N. Laos, however, the people are not dependent on the coast for salt, a good deal, though of inferior quality, being there collected in the plains. A caravan occasionally comes from Siam.

The form of government is a pure despotism. The king is assisted by four councillors. The laws, derived from the Institutes of Menu, are administered by the councillors, under whom are eight inferior judges. Their general tenor is the same as that of the Siamese laws, but they are not generally enforced with so much rigour. Unlike most E. countries, the people have a right of property in the soil, and may dispose of it at pleasure; waste land may be occupied by any one, and if he cultivate it, he establishes a right to its exclusive possession. In N. Laos a small military force is kept up. The Shans somewhat resemble the Birmese; to whose dress, habits, and customs, their own are very similar. Various books have been written in the Shan language, which is little different from the Pali: it is written in a character similar to the Birmese.

Some of the most striking and venerated Buddhist temples exist in this country. The most noted is that of Nang-rung, NW. of Zimmai, the cap. of N. Laos. The chief city of S. Laos, Lanchang, is reported to be both populous and comparatively well built. The inhab. assert that they are the stock whence the Siamese sprung, and this the latter do not hesitate to acknowledge. The emigration of the Siamese southward from Laos is conjectured by Captain Low to have been about the year 638. (Low's Hist. of Tenasserim, in Journ. of Royal Asiatic Soc., v. 245–263.)

LAPLAND, the most northerly country of Europe, belonging partly to Russia and partly to Sweden, between lat. 64° and 71° N. and long. 10° and 42° E.; bounded N. by the Arctic Ocean, E. by the White Sea, S. by Sweden and Finland, and W. by the Atlantic Ocean. Area 150,000 sq. m., about two-thirds of which belong to Russia. Pop. vaguely estimated at 60,000, of whom only 9,000 are Laplanders, the rest being Swedes, Norwegians, and Russians. That part of Lapland which lies along the N. shore of the Gulf of Bothnia, is an extensive plain, abounding in immense forests of spruce and Scotch fir; but at the distance of 80 m. from the sea, the ground becomes gradually elevated, and is at last full of lofty mountains, composed chiefly of primitive and transition rocks, very rich in copper and other metallic ores. These, between the lat. of 67° and 68° 30′, rise to a height of from 5,500 to 6,200 ft., which, in this hyperborean region, is 2,700 ft. above the line of perpetual congelation. These central mountains are the highest in Lapland. The ranges continue all the way to the N. Cape, but decline gradually in height. The principal rivers of Lapland are the Torneo, which, taking its rise in the highest mountains, near lat. 68° 20′, holds a course first SE., and afterwards nearly S., receiving tributary streams from the right and left, till it reaches the N. extremity of the Gulf of Bothnia, at the town of Torneo. The Kemi, a river almost equally large, rises in the NE., flows S., and falls into the Gulf of Bothnia, not far from the Torneo. The Lulea and Pitea both rise in the mountains of the NW., in about lat. 68°, and flow SE., nearly parallel to each other, till they also reach the Gulf of Bothnia. In N. Lapland, above lat. 68° 30′, the slope of the ground is N. The Tana, which is the principal river in the NE., and the Alten, the largest in the NW., both run into the Arctic Ocean. All these, like the rivers of Switzerland, are comparatively small in winter, and become mighty streams in summer, on the melting of the snows. Lapland abounds in Lakes: that called Enare, or Indiager, in Russian Lapland, in lat. 69°, is of great size. Several of the others are likewise extensive, and are traversed by considerable rivers.

The climate of Lapland is noted for extreme coldness; but, in fact, it is milder than that of any other region under the same parallel. The coasts of Norwegian Lapland and Finmark are free from ice early in May, whereas the sea of Siberia is never open till the end of July. The climate of one part of the country, also, differs very much from that of another. In the maritime districts the temperature is pretty uniform: the winters are not severe, but the summers are raw and foggy; while, in the interior, the winter is intensely cold, but the heat of summer is steady and fructifying. The mean annual temperature at the N. Cape (lat. 71° 11′ 30″) is 6° higher than at Enontekis in the interior (in lat. 68° 30′). Yet, at the latter, the thermometer rises in July to 64°), while at the Cape it seldom reaches 50°. In both, the summer begins in May and ends in September; but in the valleys, among the mountains, corn ripens in the short space of three months. The sun being so many hours above the horizon, the heat is then intense, and the clouds of insects are exceedingly troublesome. The cold of winter, on the contrary, is frequently so intense as to freeze brandy or spirits of wine; and the rivers in the interior are covered with ice to the depth of several feet. Towards the N., the sun remains for many weeks below the horizon in winter, and in summer is as long without setting. During the long night of winter, however, the darkness is relieved by the brightness of the moon and stars, and the vivid coruscations of the aurora borealis. The twilight is also such that, during several hours each day, it is possible to read without a lamp or candle.

The vegetable productions of the maritime and mountainous district differ as widely as the climate. In the low country, particularly near the shores of the Gulf of Bothnia, are large forests of spruce, Scotch fir, and other resinous

Digitized by Google

trees; potatoes, turnips, and other vegetables are cultivated; and roses and carnations deck the gardens during the brief months of summer. In a colder region the spruce disappears, the Scotch fir being the only tree of that class that braves its severity. It, in its turn, declines in vigour, till it totally disappears; and its place is supplied by the birch, which again yields to the *Salix glauca*, a plant unknown in Britain, and peculiar to cold climates. The *Rubus Chamæmorus*, *Rubus arcticus*, and other berry-bearing plants, are here numerous, and support even an additional degree of cold; but we arrive soon after at a climate where nothing is to be seen but a few of the hardiest plants, such as the dwarf birch, with the *Salix lapponica*, *Orchis hyperborea*, and other trees and shrubs peculiar to the country. A few mosses still keep their ground; but, before reaching the point of perpetual congelation, there is here, as in other countries quite destitute of every species of vegetation, neither plant nor animal to be seen. The rein-deer's lichen is of a bright yellow colour, which, as the plant withers, becomes snow white: it thrives better near the fir forests than in the loftier regions of birches, and a plain covered with this moss forms a Lapland meadow. It is the winter food of the cattle, and, when ground, is used as flour by the inhab. Rich pastures also are furnished by the bear's moss (*Muscus polytricha*), which, on account of its softness and elasticity, is made into beds and mattresses, alleged by travellers to be superior to any in Europe. The root of the *Angelica* and the stem of the *Fonchus* are used as food, and of all the grains barley is that which thrives best; but the potato yields a surer harvest, and, if generally cultivated, might afford sufficient sustenance for the inhabs. The turnip and cabbage, introduced by the Russians, succeed well on the low lands. The best agriculturists are the Finnish colonists, who have raised corn at Alten in lat. 70°, which may safely be pronounced the N. limit of husbandry; but tillage, generally, is in a very backward state.

Among the animals of Lapland, the rein-deer is the most valuable. It serves as the principal beast of burden; its milk is highly valued; its flesh supplies the chief nourishment of the people during a part of the year; its sinews are made into thread; its horns into spoons, and other domestic utensils; and its skin furnishes a great part of their dress. The rein-deer bears a great resemblance to the stag, but is much smaller, being in general only four feet in height from the foot to the top of the back, and but two feet long in the body. It is remarkable equally for the elegance of its shape, the beauty of its palmated horns, and the ease with which it supports itself during a long winter of nine months. In summer it feeds on grass, and is extremely fond of the herb called the great water horse-tail; but in winter it refuses hay, and obtains its whole nourishment from the rein-deer moss. It thrives best in the cold dry regions of Central Lapland, where numerous herds roam at large the whole year round, under the care of shepherds assisted by dogs. The rein-deer, indeed, form the chief wealth of the natives. The poorer classes have from 50 to 200, the middle classes from 300 to 700, and the affluent often above 1,000 head. The females are driven home morning and evening to be milked, and yield about as much milk as the goat. Horses, oxen, goats, and sheep are common; and in the forests are bears, gluttons, wolves, elks, hares, martens, squirrels, and lemming-rats. Birds of passage arrive in flocks every summer; capercailies, grouse, partridges, and aquatic fowl are very plentiful near the coast, and lammergeyers and eagles soar nearly to the line of perpetual snow. The rivers are stored with salmon, herring, and other fish; and in July and Aug. insects abound in such enormous quantities, that Wahlenberg has supposed that their dead bodies serve as an excellent manure for the soil.

The Laplanders, who call themselves *Same*, are most probably a tribe of Tschoude or Finns, though difference of situation has, in the course of ages, produced a fundamental difference of character. The Finns, an industrious though unpolished race, were encouraged to form colonies in Lapland about a century ago; and their number has since increased rapidly, while that of the Laplanders has been stationary, perhaps on the decline. Of the 27,000 inhabitants of Norwegian Lapland, there are not, it is thought, above 6,000 Laplanders. They have swarthy complexions, black short hair, wide mouths, hollow cheeks, and long and pointed chins. They are strong, active, and hardy; but they suffer much from disease, and few live beyond fifty. Dishonesty is general among them, and dram-drinking is often carried to a fatal excess. They were not converted to Christianity till the 17th century. Those of the Russian province are professedly of the Greek church, while those subject to Sweden are Lutherans. But notwithstanding the efforts of the missionaries, they are still very ignorant both of the doctrines and duties of Christianity, and retain many heathen superstitions.

The rein-deer Laplanders live either wholly or principally on the produce of their herds, building their rude huts during summer in the moss pastures of the elevated country, and in winter on the level tracts inhabited by other nations; but the fishing Laplanders confine themselves to the banks of lakes and rivers, and catch fish and beavers, which, as well as skins and venison, they exchange with the Russians and Swedes for spirituous liquors, meal, salt, and tobacco.

The clothing of these half-civilised tribes is abundantly coarse, consisting of a woollen cap, a coat commonly of sheepskin, with the wool inwards, and a great coat, either of kersey or of rein-deer skin, with the hair outwards. They have no stockings, but a kind of pantaloons of coarse cloth, or tanned leather, fitted close to the legs; their shoes are made of rein-deer's skin, the sole being taken from the forehead, and the upper leather from the legs. The women dress nearly in the same manner, but with the addition of some rude ornaments; and, in the case of the more affluent, of mantles and aprons of Russia linen or cotton. These, and leather for the boots of the men, are obtained in the petty traffic of the Laplanders with the Swedes. When travelling, and exposed to the winter blast, it is customary for the natives to cast a hood over the head, neck, and shoulders, leaving only a small opening, through which they see and breathe.

The language of the Laplanders is a Finnish dialect; but it contains so many obsolete and foreign words, that they are not intelligible by the inhabitants of Finland, nor indeed can the tribes in one part understand the language spoken by those of another. The Laponic has been mixed more than the other Finnish tongues with the German and Scandinavian, and hence its principal roots and derivations bear much less affinity with those in the languages of Upper Asia.

LAR, a town of Persia, cap. of the prov. of Laristan, 130 m. WNW. Gombroon, and 182 m. SE. Shiraz. Pop. estim. at 12,000. The town stands at the foot of a range of hills in an extensive plain, covered with palm trees. The houses gene-

Digitized by Google

rally are commodious and neatly furnished, and there are several handsome public buildings. The governor's house, in the middle of the city, is surrounded by a strong wall flanked with towers. The bazaar, which is in good repair, is alleged to be the best structure of the kind in Persia: it is very ancient, and built on a similar plan to that of Shiraz, but on a much greater scale, with loftier arches, greater length and breadth, and superior workmanship. The castle, on the top of a hill, overlooking the town, is now in ruins. Rain-water being the only water to be found in this parched and arid country, is collected during the wet season in large cisterns, similar to those in the island of Ormuz.

Lar was formerly the capital of an Arabic kingdom destroyed by Shah Abbas II. It is at present in a state of decay; but it still manufactures fire-arms, gunpowder, and cotton fabrics, exchanged at Shiraz and Gombroon for coffee, sugar, Indian silks, and European merchandise.

LARGS, a bor. of barony and sea-port of Scotland, co. Ayr, beautifully situated on a bay of the same name, and overhung on the land side by richly-wooded hills, 22 m. W. by S. Glasgow. Pop. 2,638 in 1861. The town, which is much frequented by visitors, for the purpose of sea-bathing, has an elegant suite of public baths, with a reading-room and library, and various circulating libraries. Though not built on any regular plan, it contains many excellent and substantial houses. The par. church, with its spire and clock, is conspicuous. Many gentlemen's seats are in the neighbourhood.

Largs is celebrated in history as the scene of a great battle, fought in 1263, between Haco, king of Norway, and the troops of Alexander II., in which the former was signally defeated. The cairns and tumuli, erected by permission of the conquerors, by the Norwegians over their slain, are still visible on the S. side of the village.

LARISSA (Turk. *Yenitcher*), a town of European Turkey, prov. Trikala, 25 m. NW. Volo, and 70 m. ESE. Yanina. Pop. estimated at 15,000. It is a walled town, and is situated on the Selembria (an. *Peneius*), crossed here by a bridge of ten arches. This river approaches it through a tract of woodland, almost concealing it from view, and then flows close at the foot of a convent of dervishes, two large Turkish mosques, and several groups of lofty buildings, soon after disappearing among the woods. The winter floods, which come down from the mountains with great force, frequently occasion damage to the clay-built houses in the lower part of the town. Internally, Larissa is mean and irregular; near its centre is an open space, having some good bazaars; but the streets are generally ill built, narrow, and filthy; and both houses and people seem to be in the most abject condition. Besides the mosques, there is a Greek metropolitan church; and these, with some baths and a khan, constitute all the public buildings of the place. There is very little trade, and the bazaars are ill supplied with manufactured goods. The plains surrounding Larissa consist of a fine alluvial soil, and are extremely fertile. They produce large crops of Indian corn, wheat, and tobacco, and northward are found rich sheep pastures.

Modern Larissa is supposed to occupy the site of the ancient city of the same name, claiming, in competition with Phthia, the honour of being the birthplace of Achilles, hence called *Larissean*, and being probably identical with the Πελασγικὸν Ἄργος mentioned by Homer in his catalogue of the Greek forces. (Il. B. 681.) At a subsequent period it acquired some celebrity from its adoption of the democratical form of government, and from its zealous support of the Athenian cause during the Peloponnesian war. (Comp. Aristot. Pol. v. 6, with Thuc. ii. c. 32.) It afterwards fell into the hands of Philip of Macedon and his successors, under whom it remained till the subversion of their empire by the Romans. It appears to have declined under the early Roman emperors from its ancient importance. Lucan says of it:

'Atque olim Larissa potens' . . . .
Lib. vi. line 355.

The town and neighbourhood were subject in ancient times to the same violent and sudden inundations which now cause such extensive mischief.

LARISTAN, a small prov. of Persia, part of the an. *Caramania*, extending along the N. shore of the gulf of that name, between 26° and 29° N. lat., and 55° and 58′ E. long., bounded NW. by Fars, and NE. by Kerman. Area, 16,000 sq. m. It is the poorest and least productive prov. of Persia, diversified indeed with plains and mountains, extending to the sea; but so arid and so destitute of wholesome water, that, were it not for the periodical rains, which fill the cisterns of the natives, and enable them to cultivate the date tree, with small quantities of wheat and barley, it would be quite uninhabitable. The coast is in the possession of different Arab tribes, who, under their respective sheikhs, maintain their independence, paying only a trifling tribute to the king. They are chiefly pirates, and reside in small towns or mud forts scattered along the shores of the gulf: the chief of these are, Congoon, having about 5,000 inhab.; Nakhilo, opposite the island of Shitwar; and Mogoo, which has one of the most secure roadsteads in the gulf. The interior of the country has seldom been visited by Europeans.

LARNE, a sea-port town of Ireland, co. Antrim, on a creek of the inlet of the sea called Larne Lough, 18 m. N. by E. Belfast, on the railway from Belfast to Carrickfergus. Pop. 2,768 in 1861, against 3,345 in 1841. Larne consists of an old and a new town, and has, besides, the parish church, a R. Catholic chapel, 3 Presbyterian, and 1 Methodist meeting-houses, and a national school. A manor-court is held every six weeks, and petty sessions every fortnight. It formerly carried on a brisk trade in salt; but its traffic is now chiefly confined to the export of linen, grain, and provisions. Coal is the principal article of importation. The harbour is land-locked, and is admirable for the smaller class of vessels, which enter and depart at all times of the tide. Fish is abundant, particularly mackerel, hake, cod, and mullet; salmon is taken near the entrance of the bay. The fishermen do not restrict themselves to the fishing, but are also agriculturists, and go to sea only when there is a prospect of a large take.

LARNICA, a sea-port town of the island of Cyprus, on its SE. shore, at the bottom of the bay of Salines, 23 m. SE. Nicosia. Pop. estimated at 5,000. It consists of an upper and a lower town; the latter, called the Marina, is built along the sea-shore; the other is a little more inland, and on higher ground. The houses, with the exception of a few belonging to the Frank merchants, are built of mud bricks dried in the sun, and are mean; they have mostly, however, very fine gardens, but these being inclosed by high walls, contribute little or nothing to the beauty of the town, as seen from the streets. It is the seat of a Greek bishopric, and in the Upper Town is the cathedral and convent of St. Saviour, and the Lower has a mosque, a convent, the chapel of St. Lazarus, and the remains of a castle constructed by the princes of the house of

Digitized by Google

Lusignan. Being situated on the verge of a marshy plain, screened by high mountains from the cooling influence of the N. winds, and having near it extensive lagoons, which in summer produce large quantities of salt, Larnica is hot, and, at certain seasons, unhealthy. It has no good water, except what is brought to it by an aqueduct constructed, in 1747, by a Turkish emir. There is no harbour; but the bay, which opens to the SE., and derives its name from the salt lagoons, affords good anchorage in deep water, at no great distance off shore. Larnica is the second city of Cyprus, the emporium of its commerce, and the principal residence of the foreign consuls. The exports consist of wheat, several cargoes of which are exported to Spain and Portugal with barley, cotton, silk, wine, and drugs; the imports are rice and sugar from Egypt, and cloth, hardware, and colonial produce, from Malta and Smyrna.

Drummond, Pococke, and the Abbé Mariti, concur in opinion that Larnica occupies the site of the ancient *Cittium*; while Kinneir and others suppose the latter to have been near a cape, still called Chitti, a few miles SW. from Larnica, where there are numerous tumuli and hillocks of rubbish. The probability, however, seems to be in favour of the supposition that the site of Larnica and Cittium are really identical. (Drummond, p. 250; Clarke, iv. 39, 8vo. ed.) Cittium was founded by the Phœnicians at a very remote period, and will be for ever memorable as the birthplace of Zeno, the founder of the stoical system of philosophy. Cimon, the great Athenian commander, either died at the siege of Cittium or immediately after he had taken it. The epoch of the destruction of the city is unknown.

LASSA, or H'LASSA (*Land of the Divine Intelligence*), the cap. of Thibet, prov. Oui, 360 m. E. by N. Katmandoo, the cap. of Nepaul; lat. 29° 30′ N., long. 91° 40′ E. Pop. conjectured to be about 24,000. It is situated on the Galdjao, a tributary of the Sanpo, about 28 m. from its confluence with that river, in an extensive and fertile plain about 60 m. long and 35 m. broad, surrounded by lofty mountains. The houses are built of a brown stone, are two or three stories high, with tolerably lofty rooms, and give the idea of wealth and respectability. The great temple of Buddha, which is likewise the residence of the Dalai Lama, the pontifical sovereign of Thibet, stands on the hill Bota-la, in the W. part of the city, and consists of an extensive range of square-shaped buildings, crowned in the centre with a gilded dome, and occupying altogether an area of about 40 begahs. It comprises, according to the Chinese geographers, 10,000 apartments, varying in size and grandeur according to the supposed dignity of the idols which they respectively contain. Contiguous to the temple, on its four sides, are the four celebrated monasteries of Brephung, Sera, Ghaldan, and Samyii, alleged to be inhabited by upwards of 4,000 monks, and much resorted to by the Chinese and Mongols as schools of philosophy and Buddhism. In and near the city are five other temples, built on the same general plan, but very inferior in size and splendour to that just described. Lassa, besides being the resort of zealous Buddhists from all parts of China, Turkestan, and Nepaul, is a place of considerable trade in silk, wool, and goats' hair, woollen cloths and Cashmeres, velvets, linens, asafœtida, bezoar, various kinds of fruit, silver bullion, gold dust, and precious stones, chiefly with N. Hindostan, Nepaul, Bhootan, Great Bucharia, and China; and in the markets, where the goods are exposed for sale on mats, regularly appointed market-inspectors fix the prices, from which no deviation is allowed. Handicraft is much followed, and with great success; and the lapidaries, workers in metal, and engravers are not inferior to the Chinese.

LATAKIA, or LADAKIEH (an. *Laodicea ad mare*), a town of Syria, in the pach. of Aleppo, 90 m. SW. Aleppo, and 74 m. S. by E. Iskenderoon. Pop. estimated at from 6,000 to 10,000. The town comprises an upper and a lower part, separated by gardens and plantations. The lower portion, called the *Scala*, consists of a double street, running parallel to the shore, and another leading down to it from the upper town, having coffee-houses and places of resort for seafaring people. The port is a small shallow basin with a narrow entrance, and well sheltered, except westward: on its N. side is a ruined castle, standing on a rock connected by arches with the main land; and at the E. end are the custom-house, landing-place, and several large warehouses. The upper town, which is in a very dilapidated state, in consequence of the damage occasioned by frequent earthquakes, consists of several narrow and irregular streets: the houses are constructed of cut stone, flat-roofed, usually two stories high, with an inner court. The greatest ornament of the place is a triumphal gate, between 30 ft. and 40 ft. in height, encircled near its summit by a handsome entablature: its four arches are in the Roman style of architecture, and, as the general appearance of the building denotes great antiquity, it was probably erected in honour of Julius Cæsar, or, perhaps, Germanicus. The corners are adorned with handsome Corinthian pilasters, and one of its fronts exhibits a basso-relievo, with arms and martial instruments. At no great distance is a mosque, built from the ruins of another ancient edifice, with Corinthian columns; and amidst the rocks and crags N. of the town is a large necropolis, containing numerous square sarcophagi, similar to those seen in the island of Milo. There are 3 other mosques and 2 Greek churches. The bazaars are poor and insignificant, and the only considerable article of trade is tobacco, raised near the town in large quantities, and highly prized all over the Levant.

Latakia is the representative of the ancient Laodicea, so named by its founder, Seleucus Nicator, in honour of his mother, and was a town of considerable importance before the conquest of Syria by the Romans. It was visited by Julius Cæsar, when on his way from Egypt to Pontus, and is styled Juliopolis on some of its medals. During the civil wars, Dolabella, with his fleet and army, was shut up in it by Cassius, and obliged to surrender. It became a bishop's see early in the Christian era, and was held by the Christians when the Crusaders invaded Syria. It was afterwards included in the empire of Saladin, and was finally added to the Turkish dominions by Selim I., in 1517. The ruins of the ancient city fully attest its size and grandeur, and offer ready building materials to the modern inhab. The acropolis stood on a tabular summit SE. of the town, but nothing remains of it beyond a few wells and cisterns.

LAUBEN, or LÜBEN, a town of Prussia, gov. Liegnitz, cap. circ. of its own name, on the Queis, 40 m. WSW. Liegnitz. Pop. 4,550 in 1861. The town is surrounded with old walls, and garrisoned by invalids. It is the seat of judicial courts for the town and circle; has a Rom. Cath. and three Protestant churches, a gymnasium, an orphan asylum, two hospitals, a school for teaching the art of spinning woollen yarn, and some trade in woollen and linen fabrics.

Digitized by Google

LAUDER, a royal and parl. bor. and market town of Scotland, co. Berwick, dist. of Lauderdale, of which it is the cap., near the Lauder, a tributary of the Tweed, on the road between Edinburgh and Coldstream, 24 m. SE. of the former, and 23 m. NW. by W. of the latter. Pop. 1,137 in 1861, and 1,148 in 1841. The only public buildings are the par. church, a dissenting chapel, the town-house, and gaol. Thirlstane Castle, the ancient residence of the noble family of Lauderdale, is within ¼ m. of the town. It has a branch bank, various schools, and subscription libraries. A common, comprising 1,695 acres, is divided among the burgesses. In 1482, Cochrane and other minions of James III. were hanged by order of the Earl of Arran and other noblemen, over the parapet of a bridge in the vicinity of this town. Lauder unites with Haddington, Dunbar, Jedburgh, and N. Berwick in sending one member to the H. of C. Registered electors, 66 in 1865.

* LAUENBURG, a duchy of the German Confederation, belonging to the king of Prussia, situated between lat. 52° 21′ and 53° 48′ N., long. 10° 13′ and 11° 3′ E., bounded N. by Lübeck, E. Mecklenburg Schwerin, S. by the Elbe, and W. by Holstein. Area 455 sq. m. Pop. 50,147 in 1860. Surface flat, sandy in centre, and marshy in S. On its E. borders are several lakes, the chief of which are the Ratzeburger See and Schaal See. Principal rivers, the Stecknitz and Delvenaue. It is divided into three amts., Ratzeburg, Lauenburg, and Schwarzenbek. The duchy formerly was an appendage of the crown of Denmark, but was taken from it by Austria and Prussia in the war of 1863–4. It was ceded to these two powers by the king of Denmark at the treaty of Vienna, signed October 30, 1864; but the emperor of Austria sold his share in the duchy to the king of Prussia—in the convention of Gastein, Aug. 15, 1865—for the sum of 2,500,000 thalers, or 375,000*l.*, which was paid out of the private purse of the Prussian sovereign. The duchy thus became the 'personal property' of the latter, without being incorporated with the kingdom of Prussia.

LAUENBURG, a town of Germany, cap. of the duchy of same name, on the Elbe, 28 m. SE. Hamburg, on a branch line of the railway from Hamburg to Berlin. Pop. 4,086 in 1860. The town has the ruins of a castle formerly occupied by the dukes of Saxe Lauenburg, a church, a hospital, and a large market-place. A brisk transit trade is carried on between the Elbe and Lubeck. Except a beetroot-sugar factory, Lauenburg has no manufactures of any kind.

LAUNCESTON, a parl. and mun. bor., market town, and par. of England, co. Cornwall, in the N. division of hund. East, on the Attery, a tributary of the Tamar, 19 m. ENE. Bodmin, 20 m. NNW. Plymouth, 200 m. W. by S. London by road, and 264 m. by Great Western railway. Pop. of parl. bor. (which comprises, besides the old bor., the parishes of St. Stephen, St. Thomas, Lawhitton, and St. Petherwin), 5,140 in 1861, and of munic. bor. 2,790. The town consists of two chief avenues on the London and Tavistock roads, intersecting each other almost at right angles, crossed by several narrow and mean-looking streets. It was formerly surrounded by walls, parts of which are yet standing. The ruins of an ancient castle cover a large extent of ground, and attest its former strength and importance. A part of its keep was once used as a county gaol; but the prisoners are now sent to Bodmin, which has been the assize town since 1838. A small guildhall is the only public building devoted to civil purposes. The church, a handsome Gothic structure built of granite blocks, enriched with curiously carved ornaments, has a lofty tower at its W. end. There are places of worship also for Wesleyans and Baptists, with attached Sunday schools. A grammar school, founded by Queen Elizabeth, has, according to the charity commissioners, fallen into a state of decay, there having been no master since 1821. Baron's charity school is in nearly as useless a condition, and the only place of instruction for the poor is the national school, attended by about 260 children. Numerous money charities are chiefly distributed by the corporation. Launceston is neither a manufacturing nor a commercial town. Serge-weaving and wool-spinning formerly employed a considerable number of hands, but the trade has wholly disappeared. The removal of the assizes and quarter sessions has, also, deprived the town of much of its activity, and it now depends chiefly on its retail trade and on its markets, which are large and well attended. Market-day, Saturday. Cattle fairs, first Thursday in March, third ditto in April, Whit-Monday, July 6, Nov. and Dec. 6.

Launceston, otherwise called *Dunheved*, received its first charter from Richard, earl of Cornwall, in the thirteenth century, and its privileges were confirmed by Richard II., and many subsequent sovereigns. It is governed under the Mun. Reform Act by four aldermen and twelve councillors; but it has no commission of the peace. Corp. revenue, 315*l.* in 1862. Launceston returned two mems. to the H. of C. from the 23rd Edward I. down to the passing of the Reform Act, which deprived it of one member. Previously to this act, the mems., though formally elected by the corporation, were, in fact, mere nominees of the proprietor, the duke of Northumberland. Besides depriving it of one member, the Reform Act enlarged the limits of the bor., as stated above. Reg. electors, 443 in 1865.

LAURENCE, or LAWRENCE (ST.), the principal river of N. America, and when considered, as it should be, in connection with the chain of lakes or inland seas of which it is the outlet, it is one of the largest rivers in the world, extending from W. to E. through about 27° of long., and about 8° of lat. Regarding the St. Lawrence in this point of view, or as a general name for the connecting line of that great river or water system that unites with the Atlantic in the Gulf of St. Laurence, its remotest source will be found to be the St. Louis, an affluent of Lake Superior, rising in the table land of the Huron country, near the sources of the Mississippi, flowing S., and of the Red River, flowing N. It receives different names in different parts of its course, being at first the St. Louis; between Lake Superior and Lake Huron, the St. Mary; between Lakes Huron and Erie, the St. Clair and Detroit; between Lakes Erie and Ontario, the Niagara; and from Ontario to Montreal it is sometimes called the Cataraqui or Iroquois, its course from Montreal to the sea being the St. Laurence, properly so called, but it is now usually called the St. Laurence from Lake Ontario to the sea. Considered in this point of view, its entire course, from its source to its mouth in the Gulf of St. Laurence, in about long. 64° 30′ W., may be estimated at upwards of 2,000 m. Besides traversing Lake Superior, Huron, Erie, and Ontario, the Lake St. Clair, and some similar sheets of water, are mere enlargements of its bed. Lake Michigan also is included in its basin, which is roughly estimated by Darby to comprise an area of upwards of 500,000 sq. m., including the largest collection of fresh water to be found on the surface of the globe. (Darby's Geog. View, 200. 201, 218, 231.) For considerably more than half its extent the St. Laurence forms the boundary line between

Digitized by Google

the British N. American territories and those of the U. States.

The source of the St. Louis is estimated at about 1,192 ft. above the sea level. The elevation of the river in succeeding portions of its course, with the estimated area of the great inland seas and smaller lakes, of which it is the connecting link and outlet, are exhibited in the following table:—

	Elevation above tide level	Mean depth	Mean length	Mean breadth	Area
	Feet	Feet	Miles	Miles	Sq. M.
Lake Superior .	641	900	300	80	24,000
,, Huron .	596	900	200	95	19,000
,, Michigan .	600	900	300	50	15,000
,, Erie . .	565	120	230	35	8,030
,, Ontario .	231	492	180	30	5,400
River St. Laurence and smaller Lakes	..	20	..	..	1,500
Total Water Surface .	..	..	..	..	72,930

The St. Laurence varies very considerably in breadth, in the middle part of its course inclosing a great many islands, and forming numerous rapids. In those parts of St. Mary, St. Clair, Detroit, and Niagara rivers, where no large islands are met with, the breadth of the stream is usually from ½ m. to 2 or 3 m. At the Sault of St. Louis, 5 m. above Montreal, the river narrows to 5 furlongs; and at Quebec it is not more than 1,314 yards across; but between those cities its average width is 2 m. From Quebec, the breadth of the St. Laurence begins to increase rapidly. Immediately beyond the island of Orleans it is 11 m. broad; where the Saguenay joins it, 18 m.; at Point Pelee, upwards of 30 m.; at the Bay of Seven Islands, 70 m.; and at the island of Anticosti, about 350 m. from Quebec, it rolls a flood into the ocean nearly 100 m. across.

The basin of the St. Laurence is supposed by Darby to contain 'more than the half of all the fresh water on this planet.' Taking the area and mean depth of the lakes, as given above, their solid contents will amount to 1,547,011,792,360,000 cubic ft. of water, being sufficient to envelope the entire earth with a watery covering 3 in. in depth. (Darby, Geogr. View, p. 232.)

The annual discharge, however, though prodigiously great, does not, from the nature of the basin, bear so considerable a proportion to the contained body of fluid as might be expected. Darby, from observations made at three different places, estimated the hourly discharge at the enormous amount of 1,672,704,000 cubic ft. This estimate, continues Darby, 'exceeds by more than a half the quantity which, on another occasion, I estimated for the Mississippi; and though contrary to my own opinion when I first arrived on the banks of the St. Laurence, I am convinced it falls below reality.' (Geogr. View, 233.)

The source of the St. Lawrence (St. Louis) being 1,192 ft. above the level of the sea, the average fall of the river will, perhaps, be somewhat more than 6 inches a mile. But this fall is very unequally distributed, on account of the many, and in one instance stupendous, cataracts, rapids, &c. interspersed along the river's course. The Niagara, between Lakes Erie and Ontario, has within the short distance of 35 m. a descent of at least 334 ft., 164 of which are contributed by the Great Falls. The St. Mary, between Lakes Superior and Huron, has a fall of 23 ft. in 900 yards; and the rapids are so numerous and dangerous between Kingston and Montreal, that an extensive line of canal navigation has been cut, at a vast expense, to connect Lake Ontario with the Ottawa, and enable ships to avoid this portion of the river. (For a more particular description of the great falls, the chief lakes through which the St. Laurence passes, and other parts of the basin, see arts. NIAGARA, and Lakes SUPERIOR, HURON, and ERIE.)

The great Canadian lakes, especially the three upper lakes, receive few tributaries of any consequence; but the St. Laurence, in the middle and lower part of its course, is augmented by several considerable rivers, of which the Ottawa, from the N., uniting with it near Montreal, and the Saguenay, also from the N., uniting with it 130 m. below Quebec, are the most important.

The St. Laurence is said by Darby to be as remarkable for its uniformity throughout the year in the diurnal and monthly expenditure of its waters, as the Mississippi is for its continual change. A rise of 3 ft. is a more remarkable phenomenon in the former than a rise of 30 would be in the latter. The two rivers differ widely also in numerous other particulars. The waters of the Mississippi are turbid; those of the St. Laurence and its lakes are highly transparent. In the course of the Mississippi few lakes or enlargements occur, its banks are low, much of the surface within its basin consists of open grassy plains, and before it disembogues it divides into numerous channels; the St. Laurence, on the contrary, consists, in great part, of a chain of vast lakes; as its bed enlarges, it has shelving or precipitous banks, generally covered with primeval forests; and, instead of a delta, it forms at its mouth a large estuary.

The St. Laurence is the great commercial thoroughfare of the Canadian provinces, and the northern states of the American union. Its banks, and those of its lower lakes, are studded with flourishing cities and towns, as Quebec, Montreal, St. Francis, Cape Vincent, Kingston, Toronto, Buffalo, Oswego, and others are daily springing into existence. The rise of the tide is perceptible as high as St. Francis, or Three Rivers, 432 m. up the St. Laurence, and nearly midway between Quebec and Montreal. The river is navigable for ships of the line to Quebec, and for ships of 600 tons to Montreal, 580 m. from the sea, though the navigation is in some places obstructed by rocks and shoals. Beyond the latter point, however, a succession of rapids, especially between Cornwall and Johnston, unfits it for the navigation of other than flat-bottomed boats of from 10 to 15 tons. Further up, Ontario and Erie are navigable for ships of the largest size, as is the Niagara river, both above and below the falls. The Falls of Niagara are avoided by the Welland canal, a work undertaken by a company incorporated in 1825. This canal, into the formation of which the Ouse, Welland, and Chippeway rivers enter, is 43½ m. in length, 56 ft. in breadth at its surface, and 26 ft. at its base, 8½ ft. deep; and has 37 wooden locks, 10 ft. long, 22 ft. wide, and capable of admitting ships of 125 tons. Detroit river is no more than 7 or 8 ft. in depth, and the lake and river of St. Clair are navigable only for steam-boats and schooners; but, beyond this, a wide navigation for ships of any magnitude extends nearly to the falls of St. Mary. Boats of 6 ft. draught may reach the foot of these falls, but they cannot ascend them, though canoes, at great risk, sometimes venture to shoot downwards. The falls of St. Mary are generally avoided by a portage of 2 m.

It is thus seen that there is a continued navigation for vessels of medium burden from the head of Lake Huron to Kingston on Lake Ontario, and from Montreal to the mouth of the St. Laurence. The water communication between Kingston and

Digitized by Google

Montreal is effected chiefly by a chain of canals, the principal being the Rideau canal, constructed by the Canadian, or rather the English gov., connecting Lake Ontario with the Ottawa. Rideau river and lake, the Indian lake, and the Little Cataraqui, form parts of its course. It admits vessels of about 125 tons. The Grenville and La Chine canals, with the Ottawa, continue the communication to Montreal; the Grenville canal is, however, only adapted for vessels not exceeding 20 ft. in width. On the side of the U. States, the Grand Erie, Oswego, and Champlain canals (see NEW YORK and ERIE) unite the basin of the St. Laurence with the basins of the Hudson and Susquehanna; as the Ohio and Pennsylvania canals (see OHIO, PENNSYLVANIA) do with the basin of the Mississippi. There is another line of canals in Upper Canada between Lakes Huron and Ontario.

Strong tides prevent the St. Laurence being covered with compact ice below Quebec; but the enormous masses driven in every direction by the winds and currents render that portion of the river unnavigable for nearly half the year. Between Quebec and Montreal the water communication is totally suspended by the frost from the beginning of Dec. to the middle of April. The navigation of Ontario closes in Oct. During the winter the NE. part of that lake, from the Bay of Quinto to Sackett's Harbour, is frozen across, and the rest of its surface is usually frozen to a considerable distance from the shore. Lake Erie is not so much encumbered with ice as Lake Ontario, while Lakes Huron and Michigan are more encumbered. On Lake Superior the ice often extends to 70 m. from its shores. The frost, however, by no means stops commercial intercourse, but forms the rivers and lakes into excellent roads, on which vehicles of all descriptions are used. Among these are *ice-boats*, built like other vessels with a rudder, mast, and sail, and resting on iron skates attached at either end to cross-bars under stem and stern. One of these ice-boats has, it is said, *sailed* before the wind from Toronto to Fort George on Niagara, a distance of 40 m., in little more than three-quarters of an hour. (Darby, Geog. View, St. Laurence Basin, pp. 200–251.)

LAURENCE, or LAWRENCE (ST.), GULF OF, a bay of the Atlantic, chiefly between the 46th and 51st deg. of N. lat., and the 57th and 65th of W. long., bounded N. by Lower Canada and Labrador, E. by Newfoundland, S. by Nova Scotia and Cape Breton, and W. by New Brunswick and the peninsula of Gaspé (Lower Canada). At its NW. extremity it receives the river St. Laurence; and it communicates with the ocean on the NE. by the Strait of Belle-isle, between Labrador and Newfoundland, on the SE. by its principal outlet, the channel called St. Paul's, between Newfoundland and Cape Breton, and on the S. by the Gut of Canso, between Cape Breton and Nova Scotia. It contains the large islands of Anticosti and Prince Edward; and the Magdalen Islands, a group about lat. 47° 30′, and between long. 61° 27′ and 62′ W., inhabited by about 1,000 Canadians, French, English, and Irish settlers, who carry on a profitable fishery. The shores of the gulf are generally precipitous, barren, and inhospitable; and dense fogs are very prevalent. A powerful current sets continually from Hudson's Strait into the gulf, through the Strait of Belle-isle, and meeting the stream from the estuary of the St. Laurence, forms a dangerous race off the S. coast of Newfoundland. (Purdy's Memoir of the Atlantic, pp. 105, 144.)

LAUSANNE, a city of Switzerland, cap. canton of Vaud, at the termination of a spur from the chain of the Jura, 480 ft. above the level of the Lake of Geneva, from the N. shore of which it is about 1 m. distant, and 30 m. NE. Geneva, on the railway from Bern to Geneva. Pop. 20,515 in 1860. The city is finely situated on three eminences, and their intervening valleys; but, from being on uneven ground, its streets are steep and irregular. They are also generally narrow and ill-paved, and the interior of Lausanne by no means corresponds with its exterior appearance. It is divided into 6 quarters, the city and 5 suburbs, and is now an open town, but on its S. side are some remains of ancient walls. At the highest point of the city is the castle, a massive square building of stone, flanked at its angles by four brick towers. It was originally the residence of the bishops of Lausanne, but is now the council-house of the canton: its terrace, and that of the cathedral, commands magnificent views of the vicinity, the lake, and, far beyond, the mountains of Savoy. The church, formerly the cathedral, a vast Gothic building, founded about 1000, but not finished till the 13th century, is the finest religious edifice in Switzerland. It has two large towers, one supporting an elegant spire, the summit of which is 240 ft. above the ground, and a fine round window of stained glass, 30 ft. in diameter: in its interior are some singular specimens of architecture; and amongst others the tomb of Amadeus VIII., duke of Savoy. This personage, after abdicating the dukedom, which he had greatly enlarged, and governed with singular ability, was elected pope, by the title of Felix V., under which name he is best known in history. But another pope having been elected, about the same time, by a different party in the church, Felix, to terminate the schism, resigned the tiara in 1449. He died within two years of this event. (Biographie Universelle, art. 'Savoie, Amé VIII.') The church of St. Francis; the cantonal college with a library and museum, comprising collections of antiquities and minerals found in the neighbourhood; the bishop's palace, now appropriated to a school of mutual instruction and the district prison; the cantonal hospital, a fine edifice in the Tuscan order; the lunatic asylum of Champ d'Air; the new penitentiary, established in 1822, and organised like that of Philadelphia; the barracks, theatre, charity schools, and post-office, are the other chief public buildings.

Lausanne is famous in literary history, from its having been the residence of Haller, Tissot, Voltaire, and Gibbon. The house occupied by the latter, and in which he wrote the last half of his great work, is still in good preservation, and is an object of attraction to all travellers to Lausanne. 'It was here,' to borrow the passage in which Gibbon has perpetuated the memory of the event, 'it was here, on the day or rather night of the 27th of June, 1787, between the hours of 11 and 12, that I wrote the last lines of the last page, in a summer-house in my garden. After laying down my pen I took several turns in a *berceau*, or covered walk of acacias, which commands a prospect of the country, the lake, and the mountains. The air was temperate, the sky was serene, the silver orb of the moon was reflected from the waters, and all nature was silent. I will not dissemble the first emotions of joy on recovery of my freedom, and, perhaps, the establishment of my fame. But my pride was soon humbled, and a sober melancholy was spread over my mind, by the idea that I had taken an everlasting leave of an old and agreeable companion, and that, whatsoever might be the future date of my history, the life of the historian must be short and precarious.' Voltaire, previously to his settling at Ferney, lived at Monrepos, a little distance from Lausanne, on

Digitized by Google

the Bern road; and Byron wrote his 'Prisoner of Chillon' at Ouchy, the port of Lausanne, on the lake.

Lausanne is the seat of the superior courts of justice, and authorities of the canton of Vaud, of the councils of health and public instruction, the inspector of militia, and military commandant of the canton. It has an academy, with 14 professors, founded in 1537, a college for the French language, with schools of military science, and numerous literary societies. Its manufactures are of little importance. Woollen cloths, paper, leather, and a few other articles, are made, but in small quantities. The celebrated actor, John Kemble, is buried in the cemetery of St. Pierre, about 2 m. from Lausanne, where a monument is erected to his memory.

Lausanne derived its name from the an. *Lausanium*, which stood a little to the W., in the plain of Vidy. Various Roman remains have been discovered there and elsewhere in the vicinity. Before the Reformation, Lausanne was a rich bishopric. It was taken in 1536 by the Bernese, and governed by an officer from Bern till 1798, when it fell into the hands of the French, who made it the cap. of the dép. of the Leman.

LAVAL, a town of France, dép. Mayenne, of which it is the cap., on the Mayenne, and on railway from Paris to Brest, 150 m. WSW. the former city, and 42 m. E. Rennes. Pop. 22,892 in 1861. The town proper is on a steep declivity on the W. bank of the river, across which it communicates with a suburb of about half its own size by 2 stone bridges, one built within the last 16 years. It is surrounded with old walls, parts of which are in good repair; and contains many antiquated buildings, among which is the château, formerly the residence of the dukes of Laval, with a ponderous round tower, now serving for a prison. Many of the private houses have stood for centuries, and are curious specimens of Gothic architecture, though chiefly built of timber. The church of the Trinity, on the site of a former temple of Jupiter, those of *des Cordeliers* and St. Venerand, and the new linen hall, are handsome edifices; but the prefecture, town-hall, theatre, and most of the other public buildings, are of a very ordinary description. It is the seat of tribunals of original jurisdiction and commerce, and has two hospitals, a communal college, a public library with 10,000 vols., and a Trappist convent. It has considerable manufactures of linen-stuffs and thread, with fabrics of cotton handkerchiefs, calicoes, flannel, numerous bleaching grounds, tanneries, and marble works. It is also the entrepôt for the linen fabrics and yarn made in the adjacent cantons; markets being held in it every Saturday for such goods, and for wines, brandy, timber, iron, and wool, in which it has a considerable traffic. Laval was founded by Charles-le-Chauve, in the 9th century, to arrest the incursions of the Bretons. It was taken by Earl Talbot in 1466, but retaken by the French in the succeeding year. It suffered greatly in the Vendean war at the close of last century.

LAVAUR, a town of France, dép. Tarn, cap. arrond. on the Agout, here crossed by a stone bridge, 32 miles SW. Alby. Pop. 7,438 in 1861. Lavaur is divided into an old and a new town, both of which are ill-built. It has a communal college, a public library, with 3,500 vols., with manufactures of silk stuffs, chiefly for furniture; and is the entrepôt for the silk goods of Upper Languedoc. In the 13th century it was a stronghold of the Albigenses; but, after a lengthened and vigorous resistance, it was taken in 1211 by Simon de Montfort, by whom it was treated with the utmost barbarity.

LAVENHAM, or LANHAM, a market town and par. of England, co. Suffolk, hund. Babergh, 15 m. WNW. Ipswich, and 57 m. NE. London, on the Great Eastern railway. Pop. of par. 1,823 in 1861: area of par., 2,800 acres. The town stands on a branch of the river Bret, in a valley encompassed by hills on all sides except the S., and comprises several small streets, with a spacious market-place, having a stone cross in its centre. The church, which has a steeple 142 ft. high, is a handsome structure, partly of freestone, but partly, also, of curious inlaid flint-work: the porch is of highly ornamental architecture, and the timber ceiling and several pews in the interior are exquisitely carved, somewhat in the style of Henry VII.'s chapel in Westminster Abbey: the living is a rectory in the patronage of Caius College, Cambridge. There are also places of worship for Wesleyan Methodists and Independents, with attached Sunday schools. The charities comprise a free school, founded in 1647, and endowed with about 21*l.* a year, some almshouses, and minor bequests for the poor. Lavenham had formerly a considerable business in the weaving of blue cloths, serges, and other woollen stuffs; but this has fallen to decay, and has been replaced of late years by the manufacture of hempen cloth, which here, as well as at Haverhill, employs a considerable number of hands. Lavenham is a bor. by prescription; and land within the manor descends to the youngest son, according to the custom of borough-English. It is one of the polling places for the co. Markets, small and ill-attended, on Tuesday. Fairs for butter and cheese, Shrove-Tuesday and Oct. 10.

LAYBACH (Germ. *Laibach*, Illyr. *Lublana*, an. *Æmona*), a city of the Austrian dom., cap. Illyria, and of the circ. of the same name, on the navigable river Laybach, a tributary of the Save, 80 m. SW. Gratz, 72 m. ESE. Agram, and 54 m. NE. Trieste, on the railway from Vienna to Trieste. Pop. 21,170 in 1857. Laybach consists of the town proper, 5 suburbs, and 3 adjacent hamlets. The town is situated on uneven ground, and has narrow and irregular streets, which, however, are well paved, and have foot-paths, while most of them are kept clean by running streams. Though ill laid out Laybach is tolerably well built; and has several handsome public edifices, among which are the cathedral, St. James's church, and that of the Ursuline nuns, the Gothic town hall, the lyceum, to which an agricultural garden is attached; the theatre, masquerade-hall, barracks, military school, and Auersperg palace. The town is grouped round the castle hill; the castle being now converted into a house of correction and state prison. Laybach has 12 churches, 2 hospitals, 2 convents, a gymnasium, a female school, a normal school, an ecclesiastical seminary, and orphan, lunatic, and other asylums. It is the see of a bishop, and the seat of the government of the circ., and of criminal, commercial, and mining tribunals for the prov., town and district judicial courts, the board of tolls, salt duties, and customs for the kingd. of Illyria, the agricultural society of Carniola, the museum for the duchy, and a philharmonic society. It has 2 large sugar-refineries, and fabrics of linen stuffs, porcelain, paper, and leather; its silk and woollen manufactures have fallen into decay. A considerable transit trade is carried on between Laybach and Trieste, Croatia, and S. Germany. Within the last 30 years some extensive marshes in its vicinity have been in a great measure drained, which has rendered the town much more healthy. Æmona was destroyed

Digitized by Google

by Attila in 452, but having been restored, is said to have been enlarged and fortified by Narses. It is celebrated in diplomatic history for the congress held here in 1821.

LE', or LEH, improperly called LADAKH, a city of Central Asia, and the cap. of the principality of Ladakh, in Thibet; in the valley of the Upper Indus, at the foot and on the slope of some low hills on the N. side of the river, from which it is separated by a sandy plain about 2 m. broad, 150 m. SE. Iskardo, and 930 m. NW. by W. Lassa. Lat. 34° 10' N., long. 77° 45' E. It is enclosed by a wall, furnished at intervals with conical and square towers, and extending on either side to the summit of the hills. The streets are disposed without any order, and form a most intricate labyrinth; and the houses are built contiguously, and run into each other so strangely, that from without it is difficult to determine the extent of each. The number of houses is said, by the natives, to be about 1,000. They usually vary from 1 to 2 or 3 stories in height, and are furnished with light wooden balconies. The walls are sometimes wholly or in part of stone, but in general of large unburnt bricks, whitened outside with lime. The roofs are flat, and, like the ceilings, formed of small trunks of poplar trees, above which a layer of willow shoots is laid, covered by a coating of straw, and that again by a bed of earth. They constitute a very insufficient defence against the weather, as during rain the water soon softens the earth, and pours down into the apartment. The rooms, though frequently of good size, are rarely above 7 or 8 ft. high, and unprovided with chimneys, though in the kitchen there is sometimes a square hole, which acts as an imperfect ventilator. The doors are made of planks of poplar mortised together; iron nails are rarely used, as they are too costly, the iron ore of the country being little wrought for want of fuel. A few felts and sheep-skins, and a bench or two with a large box, constitute the principal articles of furniture. The temples are built of the same materials as the houses, and pillars of timber, like those in private dwellings, support the beams, being little more, in fact, than the stems of the poplar or willow, stripped of their bark and painted. The most considerable building in Lé is the palace of the rajah, which has a front of 250 ft., and is several stories in height. The pop. is chiefly of the Thibetan stock, but numerous Cashmerians have settled in Lé, and intermixed with the natives. Lé is the seat of an active commerce in shawl-wool, brought thither from the surrounding territory, from Lassa and Chinese Turkestan, to be transported to Cashmere; and a silver coin is struck at this city, from bars of silver imported from China, which is in general circulation throughout the whole of Western Thibet.

LEADHILLS, a mining village of Scotland, co. Lanark, in an alpine region, in an irregular valley 1,300 ft. above the level of the sea, and surrounded by wild heathy hills rising to the height of 2,450 ft. Pop. 842 in 1861. The mining village of Wanlockhead, though only 1 m. distant, is in the co. of Dumfries. Both villages are inhabited solely by persons connected with the mines; which, however, belong to different proprietors, and are wrought by different companies. At Leadhills, the mineral district comprises a space about 3 m. in length by 2½ in breadth, and is principally composed of greywacke and greywacke slate, which range from SW. to NE. These strata are associated with transition clay-slate, called edge matter, from its vertical position, through which the metalliferous veins pass. The principal lead veins run SE. to NW., with a dip to the E. of 1 ft. in 3. The common and compact galena, or lead glance, are the principal ores, and furnish all the lead used in the arts. The vein stones are quartz, calcareous spar, brown spar, sparry ironstone, and heavy spar. Silver is contained in the lead, but in too small quantity to repay its extraction. The mines have been wrought from a very remote period. Gold is found in all the neighbouring streams, disseminated in minute particles among the clay more immediately covering the rocks, and also occasionally interspersed in quartz. The search for this precious metal was formerly conducted on a large scale, under royal authority, but never with much success; and all attempts of the kind, except by the curious, have long since ceased.

Leadhills has a chapel belonging to the established church, a school, and an excellent library founded in 1741. Allan Ramsay, the poet, was a native of this place. The miners of Leadhills are regarded as more than usually intelligent, moral, and respectable.

LEAMINGTON PRIORS, a town, par., and watering-place of England, co. Warwick, in Kenilworth, div. of hund. Knightlow, on the Leam, a trib. of the Avon, 2 m. E. Warwick, and 97½ m. NW. London, by London and North Western railway. Pop. of town 17,958, and of par. 17,402 in 1861. Area of par. 1,720 acres. The town which, 60 years ago, was an inconsiderable village, has now many noble and opulent residents; and the elegance of its squares, streets, crescents, and terraces, and of its numerous public and private edifices, entitle it to a place among the handsomest and best built towns in the kingdom. It formerly stood only on the S. of the river; but in recent years it has been extended to the opposite side, with which it is connected by several handsome bridges. One of these, widened and beautified in 1840, has received the name of 'Victoria Bridge;' another, about a ¼ m. lower down the Leam, built of stone, was opened in 1840. The numerous hotels are nowise inferior to those of Bath, Cheltenham, and other fashionable watering-places. It has, also, many suburban villas and detached residences.

The waters, to which Leamington owes its celebrity, embrace 11 different streams, uniting, in a single spot, saline, sulphureous, and chalybeate waters. That which most abounds, and which is known as 'the Leamington waters,' consists chiefly of the sulphate of magnesia and soda, in combination with muriate of soda, or common salt: the waters are used internally by dyspeptic and chronic patients, and have been found useful when applied externally in cutaneous diseases and rheumatism. The following Table shows the number of grains of mineral salts contained in a gallon of water from two of the principal springs:—

Description of Salts	Old Bath	New Bath
Carbonate of Iron . .	.75	
Muriate of Magnesia .	11·5	58·6
,, Soda . . .	430·	330·
Sulphate of Lime . .	112·	62·7
,, Soda . . .	152·	146·

The *pump-rooms* and *baths* are fitted up with every degree of elegance, combined with comfort and utility. They are constantly supplied with water from the springs; and these, with the assembly rooms, public libraries, music hall, and numerous promenades and pleasure gardens, form the principal attractions, and contribute chiefly to the amusement of the visitors. The parish church

Digitized by Google

is a good specimen of Gothic architecture; there are also several district churches, and places of worship for Rom. Catholics, Wesleyan Methodists, and other sects. A national school, an infant school, and several Sunday schools are well supported. There are also several charitable institutions, particularly the 'Warneford Hospital,' endowed by Dr. Warneford, where the poor have the benefit of gratuitous baths and of medical advice. The business of the town is confined to the supply and retailing of articles required by the resident gentry and visitors; and the latter are generally so numerous, as to make it a scene of bustle and activity during the greater part of the year.

The surrounding country, which is highly picturesque, furnishes an almost endless variety of pleasing rides and excursions, diversified by the fine residences of the Warwick, Clarendon, Leigh, Willoughby, and other families; the ruins of Kenilworth Castle, Guy's Cliff, and other spots equally interesting to the tourist and the antiquary.

LEBANON, an extensive and very celebrated range of mountains in W. Asia, connected northward with the table-land of Anatolia, thence running SSW. in two nearly parallel chains through Syria and Palestine, and finally connecting itself with Mounts Horeb and Sinai near the Gulf of Suez. The W. chain, called Djebel-Liban, the *Libanus* proper of antiquity, detaches itself from the mountains of Asia Minor at the Gulf of Iskenderoon; it is cut through by the deep channel of the Orontes, in lat. 37° 7′, and as it proceeds southward, at an average distance of 24 m. from the Mediterranean, it increases in height, till, in lat. 34° 12′, the culminating point of the chain, Djebel Makmel, attains an elevation of 12,000 ft. above the sea. Many summits in this part rise considerably above the limits of perpetual snow; and even in lat. 32° 50′ the ancient *Carmel* and the twin summits of *Ebal* and *Gerizim*, so famous in the history of the Israelites (Deut. xi. 29), are conspicuous from their towering height; but more southward the mountains sink much lower, and are traced with some difficulty S. of Gaza. The E. chain, now called Djebel-es-Sheikh, and identical with the *Anti-Libanus* of Strabo (lib. xvi.), detaches itself from the range of Taurus, about 60 m. E. of that last mentioned; it attains the extreme altitude of about 5,000 ft. in lat. 33° 20′, under the ancient name of *Mount Hermon*, and after maintaining a considerable elevation as far S. as the 32d parallel, becomes lower and less regular as it skirts the Dead Sea on its E. side, and finally is connected with the sandy hills of Arabia: this chain, indeed, is much less defined throughout its course, and inferior in proportion to the chain running along the coast. The valley of Bakaah (an. *Cœle-Syria*), which separates these chains, is about 100 m. long, and varies from 10 to 20 m. in breadth, having an elevation near the sources of the Orontes exceeding 2,000 ft. above the sea; and southward is the valley of the Jordan, which may be traced through Arabia to the Gulf of Akabah. (See JORDAN.) Besides the Orontes and Jordan, which are the two great rivers of this mountain system, a smaller stream, called the Leittanie, rises near Baalbec, and flows SW. into the Mediterranean, a few miles N. of Tyre. The general formation of Mount Lebanon consists of carboniferous and mountain-limestone, with greywacke and slate rising to the surface in the higher parts. The limestone in many parts is very porous, easily acted on by air and water, and rapidly worn into hollows of various shapes and sizes, which have been formed into sepulchres and caves, formerly the hiding-places of the persecuted Jews and Christians. Basalt, and other igneous rocks appear E. and S. of Lake Tiberias, and the heights skirting the Dead Sea present granite, gneiss, and dolomite. Iron and coal are abundant in some parts of the range. The former is wrought in two districts; but, owing to the distance from which the fuel has to be brought for smelting the ore, the produce of the mines is scarcely sufficient for the consumption of the pachalik. The coal-mines which, during several years, have been wrought by the government, are situated about 8 hours' distance from Beyrout, at an elevation of about 2,500 ft. above the sea. The seams vary from 3 ft. to 4½ ft. in thickness; but the coal, though abundant, is rather sulphureous. Iron pyrites are found mixed with the coal, and smelting furnaces have been erected near the pits; but the returns are quite insignificant.

The principal animals found on Mount Lebanon are, the roe-deer, the antelope, the goat, the mountain-sheep, and the jerboa; with eagles, hawks, ravens, herons, and pelicans. The general aspect of the mountain scenery is thus described by an English clergyman Mr. Elliot:—'Our route lay directly across Mount Lebanon, the chief part of which is nearly barren. Almost the only tree which it nourishes is the fir, and consequently the view is not of a character to interest a lover of scenery. From the sea and the plains the range forms a noble object for the eye to rest on; but when once the ascent is begun, few of the component elements of a beautiful prospect are discernible. Deep ravines, indeed, and rugged bectling precipices meet one at every turn, and render travelling both painful and hazardous; but there are neither glaciers nor waterfalls, neither lakes nor rivers, no verdant fields nor smiling valleys, no extensive forests, no floral richness, and no rural villages: even the cedars, once 'the glory of Lebanon' (Isa. lx. 13) have deserted it, and are replaced by the umbrella-topped fir. In one spot only called Bisharri, nearly opposite Tripoli, eight gigantic cedars, and a few of inferior size, attest the splendour of their by-gone race. The large trees measure about 36 ft. round the trunk, and more than 100 ft. between the extreme points of the opposite branches; while at the base, or a little above, they send out five limbs, each measuring 12 or 15 ft. in circ. At another spot W. of Bisharri, little known and seldom visited, this same interesting tree is found in much greater numbers, but of inferior growth. The mountaineers cut down the cedars for their charcoal and tar, which latter article is used medicinally to heal the wounds and diseases of the camel and the other animals.' (Elliot's Travels, vol. ii. p. 255.)

'In fact,' says another traveller, 'it is impossible to view these patriarchs of the vegetable world, the remains of vast forests that once supplied Jerusalem with its finest timber and its choicest incense, without feeling the truth, aptness, and precision of the prophecies concerning them:—"The rest of the trees of his forest shall be few, that a child may write them. Lebanon is ashamed and hewn down. The high ones of stature shall be hewn down: Lebanon shall fall by the mighty one."' (Isaiah x. 19, 33, 34; and xxxiii. 9.) It must not be supposed, however, from these sketches, that the *whole* mountain region is barren and uninteresting; for there are many fertile and well-peopled valleys, inhabited by an industrious people, chiefly Maronite Christians, occupied in the silk and dyeing trades, and in raising wine, corn, tobacco, and cotton. The Maronites are an active and laborious race, who

Digitized by Google

turn to good account such parts of the soil as are suited to tillage, and in no part of Syria is there so obvious an activity, and in none are the inhabitants so prosperous. The agricultural implements are rude; the plough is occasionally seen, but spade husbandry is much more used; and the steepness of the hill sides requires a succession of terraces for cultivation. Almost every male inhabitant is a small proprietor of land, and some of the emirs are large owners, either cultivating their estates themselves, or letting them out to tenants.

Some of the convents produce a wine called *Vino d'Oro*, of good quality, both red and white; but it is often spoiled by the practice of boiling, and the use of skins. The tobacco of Mount Lebanon ranks also as the best in Syria. The quantity of raw silk produced in the district, exclusive of Tripoli, amounts annually to 240,000 okes, the price being from 120 to 125 piastres per oke: of this quantity 2-3rds are exported, and the rest consumed in the country. The manufacture and weaving of silk thread is pursued to a considerable extent, and the annual consumption of gold for this trade averages about 50,000 drachms. Exorbitant taxes are, however, a great hindrance to the industry of the Lebanon.

LEBRIJA (an. *Nebrissa*), a town of Spain, prov. Cadiz, in the flat of the Guadalquivir, 29 m. S. by W. Seville, and 33 m. N. Cadiz. Pop. 10,338 in 1857. A par. church, built of the materials of an old mosque, 4 convents, a hospital, and a well-endowed classical college are the chief public buildings, and there is also a ruined castle of considerable extent. Being situated in the midst of an extensive and marshy flat, Lebrija is extremely unhealthy, especially during the heats of summer, but the circumjacent alluvial soil is highly productive. The town has fabrics of glass, earthenware, blankets and sacking, soap, bricks, tiles, and mortar.

LECCE (an. *Sybaris* and *Lupiæ*), a city of South Italy, cap. of prov. of same name, on the railway from Brindisi to the Gulf of Taranto, about 22 m. SSE. the former city. Pop. 19,419 in 1862. The city is fortified by a wall and towers, above a deep ditch, and possesses a castle or citadel. It comprises the usual appendages of a provincial cap., a seminary, tribunal, and theatre; and adds to these a large manufactory of tobacco, the produce of which, as snuff, is highly esteemed throughout the kingdom. The principal gate of entrance to Lecce is very magnificent, though in a strange overloaded style of architecture. The facility with which the stone of the country is wrought has proved of great advantage to the architectural embellishments of Lecce; but it has also afforded a fatal facility of propagating the extravagant taste exemplified in every building of consequence. Among these edifices the churches are pre-eminent; they exhibit all the grotesque barbarity of the Gothic, without any of its spiry lightness. In the principal square is an antique column brought from Brindisi: it supports the statue of St. Oronzio, the protecting saint. The inhabs. of Lecce are mostly in easy circumstances, and renowned for their courteous polished manners. The climate is oppressively hot during the summer. The surrounding distr. is one of great fertility. It supplies, however, silk, wool, flax, cotton, oil, and wine, of good quality, in which the city is said to have an active trade. Lecce has also manufactures of lace, linen thread, woollen cloth, and cotton and silk fabrics. The produce of Lecce is mostly exported from Otranto, or from San Cataldo on the Adriatic.

Sybaris, or Lupiæ, on the site of Lecce, was very ancient. Augustus remained in it for some days after his return to Italy on hearing of the death of Cæsar. In the middle ages it was called *Lycium*. It was made the fief of an earl soon after the establishment of the Normans; and Tancred, one of its earls, succeeded to the crown of Naples in 1189. The novelist Ammirato, and the anatomist Baglivi, were natives of Lecce.

LECHLADE, a market town and par. of England, co. Gloucester, hund. Brightwell's Barrow, at the confluence of the Lech with the Isis, 13 m. E. Cirencester, and 68 m. W. by N. London. Pop. of par. 1,328 in 1861; area of par. 3,980 acres. The town consists chiefly of a single, long, wide, and well-built street; and the river (which is navigable up to this place, a distance, by water, of 146½ m. from London) is crossed by a good stone bridge. The church, a handsome stone structure, built in the reign of Henry VII., has a tower and spire at its W. end. There are also places of worship for Wesleyan Methodists and Baptists, and two Sunday schools. The principal importance of Lechlade is derived from its site at the junction of the Thames navigation with the Thames and Severn Canal, which makes it the seat of a somewhat extensive transit trade in butter, cheese, corn, and malt. Markets on Tuesday; fairs, Aug. 5 and 12 and Sept. 9, for cattle and cheese.

LECTOURE (an. *Lactora*, and *Civitas Lactoratensis*), a town of France, dép. Gers, cap. arrond., on the summit of a steep isolated rock, 19 m. N. Auch. Pop. 5,914 in 1861. The town was formerly surrounded with a triple range of strong walls, the remains of which still exist. It is traversed by a wide, regularly built, and clean street, at one end of which is a hospital occupying the site of an ancient castle, and at the other a handsome Gothic church, built by the English. Near the church is the old episcopal palace, now the town-hall, sub-prefecture, and court of primary jurisdiction. In the town-hall are portraits of Marshal Lannes, duc de Montebello, and other distinguished individuals, natives of the town; a marble statue of the marshal is also erected on the public esplanade. Lectoure has manufactures of serge and coarse woollen cloths, and a considerable trade in cattle, wines, brandy, and agricultural produce.

Lectoure, though not mentioned by the ancient geographers, has several Roman antiquities; the chief is a votive altar, in good preservation, which dates from the time of Gratian. At the foot of the hill on which the town is built is a fountain of excellent water; its modern name is *Hondelia*, derived, it is said, from its ancient name, *Fons Deliæ*; having been consecrated to Diana, who had a temple in the vicinity. Lectoure belonged, for a lengthened period, to the counts of Armagnac. The last of that family having been besieged in it in 1473, by the troops of Louis XI., commanded by the cardinal of Alby, surrendered on terms which the cardinal offered and swore to observe. No sooner, however, had the perfidious ecclesiastic got the count into his power, than he ordered him to be assassinated, and gave up the town to military execution.

LEDBURY, a market town and par. of England, co. Hereford, hund. Radlow, near the Leden, a trib. of the Severn, on the railway between Hereford and Worcester, 13 m. E. Hereford, 14 m. SW. Worcester, and 105 m. WNW. London. Pop. of town 3,263, and of par. 5,598 in 1861: area of par. 8,630 acres. The town, situated on the slope of a hill, at the extremity of the Malvern hills, comprises two principal intersecting streets, with others of inferior character. Many of the houses are handsome, and built of stone

Digitized by Google

quarried in the neighbourhood. The church, which is of Norman architecture, with more recent alterations and additions, comprises a nave, aisles, and chancel, with a chapel; and the tower, which is detached from the rest of the building, is surmounted by a fine spire 60 ft. high: the living is a vicarage, in private patronage. There are, also, places of worship for Independents, Baptists, and Wesleyan Methodists, with well-attended Sunday schools attached to each; a national school for both sexes, partly supported by the produce of two or three old charities; and a school of industry for girls. The free school, founded in the 16th century, formerly had the reputation of being a good classical school; but the endowment is very trifling, and the instruction is now confined to reading, writing, and arithmetic. St. Catherine's hospital, for poor men and women, founded by Hugh Folyot, bishop of Hereford, in 1232, comprises a master, chaplain, 7 brethren, and 3 sisters, each of whom, in addition to a comfortable dwelling and some yearly allowances, receives a stipend of 6s. a week. The hospital is a handsome structure, with two wings, and a chapel and hall in the centre. The par. is unusually rich in money charities, distributed chiefly by the clergy and churchwardens. Ledbury was celebrated during the reigns of Elizabeth and James I. for its extensive manufactures of broad cloth and silk; but they are now quite extinct. Malting, tanning, and the weaving of sacking, employ a considerable number of hands; but the present importance of the town is derived from its being the chief market of a district producing large quantities of hops, cider, and perry. Stone and marble are quarried in the neighbourhood.

Ledbury was anciently a parl. bor., and, in the reign of Edward I., twice returned mems. to the H. of C.; but the privilege was not preserved.

LEEDS, a parl. and mun. bor., par., and celebrated manufacturing town of England, being the great centre of the woollen cloth trade, co. York, W. riding, locally situated in wap. Skyrack, on both sides the navigable river Aire, 23 m. WSW. York, 29 m. N. Sheffield, 170 m. N. by W. London by road, and 192½ m. by Great Northern railway. Pop. of par. and of bor., which are co-extensive, 207,165 in 1861. In 1841 the pop. was 151,874. The principal and best part of Leeds stands on the slope of a hill N. of the Aire, and the buildings cover a space of about 1,000 acres. The town, speaking generally, is irregularly built, with narrow and crooked streets; but the centre and W. end comprise several handsome streets lined with fine houses. Briggate, in the centre of the town, is the largest, and is as wide as Oxford Street, London. Three stone bridges, and two of cast iron, on the bow and string principle, cross the river Aire, on the S. side of which are the extensive suburbs of Holbeck and Hunslet, containing many large factories. The town is well paved, flagged, and lighted with gas. Formerly the supply of water was rather deficient; but extensive works have been completed within the last thirty years, by which an abundant supply of excellent water is conveyed into the town from the Harewood hills, 5 or 6 m. distant, at an expense of about 130,000*l.* Chief among the public buildings is the new town hall, a handsome Corinthian pile, 250 ft. by 200, with a dome 250 ft. high, which was opened by Queen Victoria, in 1858. In the vestibule is a statue of her majesty, in white marble, and in the hall, 161 ft. long, are statues of Edward Baines and Robert Hall. Other notable public buildings are the cloth-halls. The Mixed-cloth Hall, at the corner of Wellington Street, built in 1758, is a quadrangular building, 380 ft. long and 200 ft. broad, enclosing an open area, and having about 1,800 stands. The White-cloth Hall, for the sale of undyed goods, on the plan of the former, was erected in 1775: it has about 1,200 stands. A third building of the same description, in Albion Street, but smaller, intended to accommodate traders not licensed to sell in the other halls, has been long abandoned. Close to the Mixed-cloth Hall is a handsome edifice, called the 'Commercial Buildings,' appropriated chiefly to news-rooms and bankruptcy courts, but partly also to trading purposes. Near the Commercial Building is a statue of Sir Robert Peel, erected in 1852. The court-house, in which the petty and quarter sessions of the bor. and the Michaelmas sessions of the W. riding are held, is a well-arranged building for police purposes; but the gaol attached to it being too small for the wants of the town and borough, a gaol on the most approved construction, to accommodate in separate cells about 300 prisoners, was erected in 1847, on Armley Hill, at a cost of 30,000*l.* The corn exchange faces Briggate: its front is of the Ionic order, and has a niche in the centre, with a statue of Queen Anne. The stock exchange was opened in 1847. The central market, erected at an expense of 35,000*l.*, is large, handsome, and commodious: there are also two other markets. The cavalry barracks, erected in 1820, on the N. side of the town, are well built and very extensive, occupying, with the parade grounds, nearly 12 acres. The workhouse, in the Elizabethan style, has room for about 800 inmates. In 1862 the gross estimated rental assessed to poor rate was 598,242*l.* Among the other public buildings are the hall of the Philosophical and Literary Society, a theatre on the S. side of the town, and two commodious bath establishments. The places of worship in the town comprise 27 churches and 49 chapels. The par. church, rebuilt, on the site of an old Gothic edifice, in the perpendicular English style, is one of the largest and handsomest churches in England: the living is a vicarage, worth above 1,200*l.* Among the other notable churches are St. John's, St. George's, and St. Saviour's, the latter built in 1843, in the pointed style, with a tall spire. The dissenting places of worship include two large Wesleyan chapels, an Unitarian chapel in the pointed style, and four Roman Catholic chapels, one with a tower 150 ft. high. An Independent chapel, erected in East Parade, at a cost of 12,000*l.*, has a handsome Doric portico. A spacious cemetery, near Woodhouse Moor, occupying 10 acres of ground, was opened in 1835, for the use of persons of all religious denominations: in the centre is a chapel, beneath which are large vaults. There are also two large parochial cemeteries, one at Burmantofts, and the other at Hunslet, purchased by rates on the inhabitants, and each having an unconsecrated as well as a consecrated portion of ground, and two chapels for the accommodation of dissenters as well as churchmen. The establishments for general education comprise, 1. A well endowed grammar-school, founded in 1552, and rebuilt, in 1860, in the Gothic style, at a cost of 15,000*l.* It gives free instruction in classics and the elements of mathematics to the sons of all residents in Leeds, and enjoys the reputation of being ably and successfully conducted; 4 scholarships in Magdalen College, Cambridge, and an exhibition in Queen's College, Oxford, are open to the competition of its pupils. 2. A national school, attended by upwards of 600 children. 3. A Lancastrian school, established in 1811, and giving instruction to 300 boys. 4. A model infant school, where a considerable number of persons have been trained for the teaching of

Digitized by Google

infant schools, and where about 120 children receive regular instruction. 5. Marshall's schools, comprising a boys', girls', and infants' schools. 6. Burmantoft's Industrial Schools, with a building in the Elizabethan style, 276 ft. long. Numerous other public schools are supported by the Church, the Wesleyans, the Independents, and other religious bodies. St. John's Charity, founded in 1705, has for its object the training of girls to become household servants; its management is vested in a committee of subscribers. The chief societies for the promotion of literature and science are the Philosophical and Literary Society, which has a handsome hall and museum in Park Row; and the Mechanics' Institution and Literary Society, which has a hall in South Parade, a library of 10,000 volumes, and upwards of 2,000 members, with a large day school, a school of design, and numerous evening classes. Leeds has also a school of medicine, a society for the promotion of the fine arts, and five subscription libraries. The charitable institutions comprise, besides the schools already mentioned, an infirmary, founded in 1767, supported by subscriptions, and accommodating 150 in-patients; a fever hospital, called the 'House of Recovery;' a lying-in hospital, an eye and ear infirmary, and a public dispensary. There are likewise several endowed charities for the aged poor, and other benevolent institutions, the gross revenues of which exceed 4,000*l.* a year.

Leeds owes its great and long-continued eminence as a manufacturing town, partly to its advantageous situation, and partly to the industry and ingenuity of its inhabs. It stands in a fertile country intersected with rivers, and possessing rich and all but inexhaustible beds of coal. The natural facilities afforded by its position for procuring raw materials, and for disposing of its manufactured produce, have been vastly extended by artificial means. On the one hand it communicates with the Humber, and, consequently, with the German Ocean, by means of the Aire and Calder Navigation, which allows vessels of 120 tons to come up to the town; and, on the other hand, it communicates with the Mersey and Liverpool by the Leeds and Liverpool Canal. Railways have also been opened in every direction,—to York, Hull, Manchester, Liverpool, Skipton, Lancaster, and two by Derby and Lincoln to London.

The staple manufacture is the production of woollen cloths, but the spinning of flax and worsted is also an important branch of industry. The woollen manufacture of Leeds and its neighbourhood is carried on in two ways—on the domestic system, and by means of factories. According to the former plan, the business is conducted by a number of small masters, generally possessed of very limited capital, who have in their houses from two to four looms, and employ, besides themselves and their families, from three to seven journeymen. Formerly they used to carry the wool by hand-labour through all the stages of its manufacture, till it was made into undressed cloth; but for years past they have availed themselves, in the performance of various processes, of the *public mills* that have been erected, mostly on a joint-stock principle, in all the villages within the district where this system prevails. By this means, the domestic cloths are produced as good and cheap as those made in factories. The wages of hand-loom weavers in and about Leeds vary from 12*s.* to 18*s.* a week. The factory system owes its existence to the improvements of machinery subsequent to 1790; and, though strongly opposed by the domestic clothiers, has greatly improved the manufacture, and raised Leeds to its present eminence as a mart for superfine broad cloths. The master manufacturers, who necessarily either possess or have the command of large capital, employ a greater or less number of workmen, in one or more large factories, under their own inspection, or that of their superintendents. In these factories the whole processes are carried forward, from the breaking of the wool to the finishing of the cloth for the consumer. The woollen fabrics manufactured at Leeds comprise broad cloths, ladies' cloths, kerseys, swansdowns, and beavers. The goods sold to the merchants in a rough or undressed state are finished in dyehouses and dressing-shops, which of themselves give employment to upwards of 3,000 persons. The sale of cloths was formerly effected in the different cloth-halls, on the mornings of Tuesday and Saturday, between 11 and 12; but of late years, or since the manufacturers began wholly to finish their goods, the cloth-halls have lost a good deal of their importance, and a great deal of the business that used to be entirely carried on in them is now transacted in private counting-houses. Shalloons, stuffs, and camlets are made to some extent; and immense quantities of unfinished stuffs are brought here to be finished from Bradford and Halifax. Some of the flax mills are immense establishments; large quantities of linen yarn are sent to Barnsley to be manufactured into linens, and large quantities are also sent to Ireland and France: canvass, sacking, and linens are also made to some extent in the town. The manufacture of machinery employs a great number of hands; and there are likewise extensive chemical works, large glass-houses, potteries making goods almost exclusively for exportation, extensive tobacco-mills, and soapworks. The total number of occupations to which the cloth manufacture alone gives rise has been estimated at 120. The woollen trade is supposed to employ about 18,000, and the flax trade 10,000 hands.

Leeds was first incorporated as a mun. bor. in the reign of Charles I., and received its charter in the 13th of Charles II. Under the Municipal Reform Act it is divided into 12 wards, and the government is vested in a recorder, mayor, 16 aldermen, and 48 councillors: corporation revenue, 58,860*l.* in 1862. An efficient body of police has been organised, similar to that of the metropolis. Notwithstanding its importance, as the first clothing town of the British empire, Leeds was not represented in parliament till 1832, when the Reform Act conferred on it the important privilege of sending two mems. to the H. of C. Registered electors, 7,966 in 1865. Markets on Tuesday and Saturday; cattle fairs on alternate Wednesdays; and for horses and hardware, July 10, 11, Oct. 8, and Nov. 9.

Leeds is mentioned by Bede and in the Domesday survey. Leland, early in the 16th century, describes it as a market town, subsisting chiefly by clothing, reasonably well built, and as large as Bradford, but considerably less than Wakefield. The clothing trade had been introduced about 60 years before Leland's time, and the town has since gradually risen, by the industry of its inhabs., till it has become the third manufacturing town of the first manufacturing nation of the world.

LEEK, a manufacturing market town and par. of England, co. Stafford, hund. Totmonslow, on the Churnet, a tributary of the Trent, 12 m. S. Macclesfield, and 134 m. N. by W. London, by London and North Western railway. Pop. of par. 14,326 in 1861. Area of par. (comprising 10 townships), 34,370 acres. It is situated in the moun-

Digitized by Google

tainous part of the co. called the Moorlands, on the road between London and Manchester, and consists of a principal street lined with some good modern houses, and crossed by several narrow and irregular avenues. The parish church is an old Gothic structure, with a square tower: in the churchyard are the remains of a Danish cross, 10 ft. high. There are places of worship for Independents, Wesleyan and New Connexion Methodists, and the Society of Friends. A mechanics' institute confers important benefits on the manufacturing population. An almshouse for eight widows and some other charities have endowments amounting to 180*l.* a year.

Leek has long been the seat of a manufacture of broad silks and plain ribands, many of the latter being woven by power-looms. The silk-mills embrace not only the weaving of ribands by power-looms, but the throwing and spinning of silk, and its twisting into sewing-silk and braid. The hand-loom weavers are chiefly employed on checked or figured silk neckerchiefs, and a few gros-de-Naples and figured gown-pieces, the best black ribands, and silk serges of superior quality. These goods are prepared chiefly for the London market; but the sewing-silks, twist, and ribands are mostly for exportation. The hand-loom work is given out warped and wound to *undertakers*, who possess a varying number of looms, and employ journeymen and apprentices, to the former of whom they pay the warehouse price, after deducting for loom-rent. There are numerous undertakers in the broad trade, and they appear to be superior both in habits and condition to the same class in most other places, many of them possessing convenient and substantial dwelling-houses, the highest stories of which are used as workshops. The journeymen are an inferior class, living in very small cottages; but though their houses be poor and mean, they are clean, as are also the persons and dress of the weavers and their families. The wives are commonly piecers and doublers, or overlookers in the factories, or else, if at home, wind silk; the children also get employment in the factories. The weekly earnings of the broad-loom weavers vary from 7*s.* 6*d.* to 9*s.* nett. The weekly nett wages of the power-loom weavers average 16*s.*, and the women working in the mills usually earn from 5*s.* to 5*s.* 6*d.* From these rates there has been little variation; and the trade of Leek generally appears to be of a steadier character than that of other towns engaged in the same manufacture. The cotton trade, which has extended itself thither from Lancashire, is not extensive. Coal is procured from the neighbouring Blue hills, in quantities amply sufficient for the wants both of the manufacturers and the pop. generally.

Leek is one of the polling places for the N division of Staffordshire. Courts leet and baron are held annually by the lord of the manor (Earl Mansfield), who elects a constable for the civil government of the town. Markets on Wednesday: fairs for cattle and pedlery, Feb. 7, Easter-Wednesday, May 18, Whit-Wednesday, July 3 and 28, Oct. 10, and Nov. 13.

LEEUWARDEN, a town of Holland, prov. Friesland, of which it is the cap., on the Ee, 31 m. W. Groningen, on the railway from Groningen to Haarlingen. Pop. 25,409 in 1861. The town is surrounded by an earth rampart and ditch, and intersected by numerous canals, the banks of which, like the ramparts, are planted with trees. It is well built; its streets are wide and regular; and it has several handsome public edifices, including the palace of the prince of Orange, the town-hall, arsenal, exchange, and house of correction. It has twelve churches, in one of which the princes of Orange are buried, a synagogue, a Latin school, a branch of the Society of Public Good, a printing establishment, and considerable manufactures of linen fabrics, paper, Friesland-green, and a large general trade. It is the seat of tribunals of primary jurisdiction and commerce, and the residence of a provincial commandant, a military governor, a provincial head of police, and a receiver of taxes for the prov. It sends 4 mems. to the provincial assembly.

LEGHORN (Ital. *Livorno*, Fr. *Livourne*), a city and sea-port of Italy, prov. Pisa, on the Mediterranean, 62 m. WSW. Florence, on the railway from Genoa to Rome. Pop. 91,432 in 1862. The city is of a square form, and about 2½ m. in circ., surrounded with new walls, and entered by five gates. It is neat, clean, and well built, and its general air of animation, activity, and business is singularly opposed to the listless idleness of the inland towns of Italy. Its streets are in general wide and well paved, especially that which runs in a direct line from the gate of Pisa to the harbour, enlarging near its centre into a spacious square. The N. part of the city, called *Venezia Nova*, is intersected by canals, and comprises numerous wharfs, warehouses, and other buildings adapted to commerce. Leghorn has an outer and inner harbour, and a good roadstead. The outer harbour is protected by a fine mole, which runs NNW. upwards of ½ m. into the sea. The port is apt to become encumbered with mud, and the water within is rather shallow, varying from 8 ft. in the inner basin to 18 or 19 ft. at the end of the mole. The outer harbour is unfit for ships of more than 400 tons; and the inner harbour, called the *Darsena dei navicelli*, is only used for repairing ships, and for the reception of galleys and other small craft. A lighthouse, the lantern of which is 170 ft. above the sea, is built on a rock a little SW. from the mole. The roadstead lies WNW. from the harbour, between it and the Melora bank. The latter is a sand, 4 m. in length by 2 in breadth, lying N. and S. about 4 m. from shore. It has mostly from 3 to ½ fathoms water over it; but towards its S. extremity, on some rocky points which project above the water, the Melora tower has been constructed to serve as a sea-mark. During S. winds there is sometimes a heavy sea in the roads, but the holding ground is good, and with sufficient anchors and cables, and ordinary precaution, there is no danger. The lazaretto, one of the best in Europe, lies on a little island to the S., about 1 m. from the tower.

The public and private buildings of Leghorn are generally well adapted to their purposes, without being magnificent. The chief public edifices are the former ducal palace, the arsenal, the *duomo* or cathedral, a Gothic building, designed by Vasari, six other par. churches, two Greek churches, chapels belonging to the English factory, and the Dutch and German Protestants, an Armenian, and a Maronite-Arab church, a large and beautiful synagogue, a mosque, 3 hospitals, the female charity school of St. Peter and St. Paul, the theatre, and the public baths. Leghorn has also a citadel, an old castle, constructed in 1595, 2 lazarets, a workhouse, a house of refuge, a savings' bank, a large public school, established 1746, and which has about 350 pupils, schools of navigation and artillery, architecture and painting, and an academy of sciences, letters, and arts, with a library of 6,000 vols. open to the public. The city possesses few works of art, except a fine marble statue of grand duke Ferdinand I. of Tuscany, supported by four kneeling figures in bronze. It stands on the quay of the inner harbour, and is said to have been executed by John of Bologna.

Digitized by Google

In the cemeteries beyond the walls are some good specimens of sculpture. The English burial-ground, or *Campo Inglese*, contains the remains of Smollett, and of several other distinguished Englishmen.

From being in a marshy situation, Leghorn is not quite salubrious, though great improvements in draining have been recently effected, by which the public health has been much benefited. There are no good wells in the city, and water is brought by an aqueduct from Colognole 12 m. distant. One of the most remarkable monuments in the town is the *Cisterna*, belonging to this aqueduct, whence water is distributed through the town.

Leghorn has a considerable coral fishery, but the greater portion of its inhab. are engaged in manufactures and commerce: it produces woollen caps, straw hats, glass, paper, soap, starch, and cream of tartar; and it has numerous coral and alabaster factories, rope walks, building docks for merchant vessels, and tanneries. It was made a free port by Cosmo I., about the middle of the 16th century; and the comparative security and freedom which foreigners long enjoyed in Tuscany, still more than its advantageous situation, rendered Leghorn for a time one of the first commercial cities of Italy. Its exports are similar to those from the other Italian ports, consisting principally of raw and manufactured silks, straw hats, straw platting, and straw for platting, all excellent; oil, fruits, wines, wool, boracic acid, rags, cheese, marble, argol, paper, anchovies, coral, manna, hemp, lamb-skins, timber, with wheat and other species of corn from the Black Sea, Egypt, and Barbary; cotton from Egypt, and brimstone from Sicily. The export at secondhand of produce from the Euxine and the Levant has, however, greatly declined of late years; the English, Americans, and other nations, now generally importing such produce direct from Odessa, Smyrna, and Alexandria. The imports comprise sugar, coffee, and all sorts of colonial produce; raw cotton, cotton and woollen stuffs, cotton twist, and other manufactured goods; salted fish, indigo, and other dye-stuffs, rice, hardware, earthenware, and metals.

Leghorn is supposed to be the anc. *Portus Herculis* or *Labronis*; but it has no remains of antiquity. In the 15th century it was a mere village surrounded by swamps, and it owes much of its eminence and prosperity to the munificence of the Medici family, and the liberality of the former rulers of Tuscany.

LEGNAGO, a fortified town of Italy, prov. Verona, 22 m. SE. the city of that name, on the Adige, and on the high road from Mantua to Padua. Pop. 10,318 in 1862. Its situation is unhealthy. It has several churches, convents, and barracks; a powder magazine, a theatre, a hospital, a royal gymnasium, a manufacture of dyed leather, and some trade in corn, rice, and silk. Legnago is supposed to have been founded towards the latter period of the Lombard monarchy. It was fortified in the 16th century, and taken by the French, in 1796, after a 3 days' siege.

LEICESTER, an inland co. of England, nearly in its centre, having N. the cos. of Derby and Nottingham, E. Lincoln and Rutland, S. Northampton and Warwick, and W. Stafford and Derby. It is of an oblong form; greatest length, about 48 m.; greatest breadth, about 28 m. Area, 803 sq. m., or 514,164 acres, of which about 480,000 are supposed to be arable, meadow, and pasture. Surface, varied and uneven; but, except in the district of Charnwood Forest, to the S. of Loughborough, the hills do not attain to any considerable elevation, and are susceptible of the highest cultivation. The soil consists mostly of clayey and sandy loams; and in some parts, especially along the Soar, there are very rich and extensive meadows. The pastures are generally excellent; and it is much more a grazing than an agricultural co. It is famous for its breeds of cattle, sheep, and horses; all of which were much improved through the skill and long-continued exertions of the celebrated Mr. Robert Bakewell, of Dishley, in this co. It is, however, true, that the Dishley breed of long-horned cattle, so famous a few years ago, are everywhere losing ground; and that even in this, their native co., they are now very generally superseded by the short-horns and other breeds. The fine rich cheese called Stilton is principally made in this co., in the farms round Melton Mowbray. The Leicester sheep, though of different varieties, all yield long combing wool. Horses are reared in considerable numbers. Barley is the principal corn crop, but wheat and oats are also extensively cultivated. Property mostly in large estates; farms of all sizes, and mostly held at will. Coal is wrought at Ashby-de-la-Zouch, Whitwick, and other places; and iron and lead, with lime and slates, are also products of this co. Leicestershire is the principal seat of the manufacture of woollen stockings and shirts, gloves, and fancy hosiery; the business being principally carried on in the towns of Leicester, Loughborough, and Hinckley; but it is also widely diffused throughout the co. Hats are made at Loughborough and other places; and this is one of the principal malting counties. Owing to the openness of the country, the number of resident gentry, and other recommendations, Leicester has been long famous as a hunting co. Melton-Mowbray, in the centre of the sporting district, has accommodations for a vast number of horses; and during the season is crowded with visitors, foreign as well as domestic. Principal river Soar; and the co. is intersected by several canals and railways. Leicester is divided into 6 hundreds and 216 parishes. It sends 6 mems. to the H. of C., being 4 for the co. and 2 for the borough of Leicester. Registered electors of the co., 11,050 in 1865, being 4,767 for North Leicestershire, and 6,283 for South. At the census of 1861, Leicestershire had 51,894 inhabited houses and 243,648 inhabits., while, in 1841, there were in this co. 44,774 inhabited houses and 215,867 inhab. Gross annual value of real property assessed to income tax, under schedule (A), in the Northern division 668,533*l.*, and in the Southern division 590,184*l.* in 1862.

LEICESTER, a parl. and mun. bor., and cap. co. the same name, hund. W. Goscote, on the E. bank of the Soar, 25 m. SSE. Derby, 34 m. E. by N. Birmingham, and 87 m. N. by W. London, on the Midland railway. Pop. of bor. 68,056 in 1861. Area of mun. and parl. bor. (which are co-extensive, and include the old bor. and its liberties, with the part called the Castle view), 3,960 acres. The town, though irregularly built, has a respectable appearance, the streets being clean, and the houses in the principal thoroughfares substantial and neat. The main street is joined near its centre by several other handsome streets: at the corner of one of these stands the newsroom, a square building of Ionic architecture, forming one of the chief ornaments of the place; and in it also is the New Hall, built in 1831; having apartments for concerts, and the Mechanics' Institute. The paving, lighting, and general economy of the town are well conducted, and have been greatly improved within recent years. Water is obtained from Thornton, a distance of 9 m. The public buildings devoted to civil purposes comprise, among others, the guild-

Digitized by Google

hall, an old and unpretending building, in which is a library of ancient printed books and a few MSS., one of which, the '*Codex Leicestrensis*,' is of considerable value; the assembly-rooms, with a commodious adjoining theatre; and a town-museum, established by the corporation, under the Museums' Act. The greater part of the objects in the latter were presented to it by the Literary and Philosophical Society, who have commodious rooms in the building: among its rarities is the celebrated Roman *milliare* or milestone, inscribed to the Emperor Hadrian, found in the neighbourhood in 1771, and valuable as deciding the disputed point whether Leicester was the *Ratæ* or *Ragæ* of the Romans. (Gough's Camden's Britannia, ii. 314.) A market-house is in the market-place, which has been considerably enlarged. The assize hall, formerly the Castle Hall, is 178 feet long. The bor. gaol is too small for the proper classification of the prisoners; this, however, is effected in the co. gaol, a massive structure, enclosing an area of 4 acres, built in 1824 at a cost of 75,000*l.*, and subsequently enlarged at a farther cost of 25,000*l.* An infirmary and fever hospital were erected in 1771; and a co. lunatic asylum, a spacious and imposing building, with extensive grounds, erected in 1837, and since greatly enlarged at a total cost of 45,000*l.*, affords accommodation for 237 patients. There are also public baths, partly supported by the corporation. Among the ecclesiastical edifices are 9 parish or district churches, and 30 places of worship for dissenters. St. Nicholas, the oldest church, is a structure of Norman architecture, supposed to have been built of the materials of the adjoining Roman wall; it has a square W. tower between the nave and chancel. St. Mary's, in the Saxon and early English style, has a lofty tower and steeple. St. Martin's, the largest church in the town, is a cruciform structure, erected at different periods between the 12th and 16th centuries, and surmounted by a plain spire. St. Margaret's, in the early English and later styles, occupies the site of the Saxon cathedral and bishop's palace; it is remarkable for its handsome and lofty tower. All these churches have recently been restored. The other churches, four of which are modern, are commodious. The old Baptist chapel in Harvey Lane (now used as a schoolroom) deserves notice, as being the scene of the pastoral labours of Robert Hall, one of the most able and eloquent divines of his day. A public cemetery of 25 acres, established by the corporation, was opened in 1850. It has chapels in the decorated style connected by extensive cloisters, and cost above 12,000*l.*, exclusive of the land. Connected with the various places of worship are numerous Sunday schools, furnishing religious instruction to nearly 5,000 children; besides which, 1 national, 2 Lancastrian, and 3 infant schools are attended by about 1,300 scholars, and 2 parochial schools by 220 boys, who are clothed as well as educated. A collegiate school, established in 1836, for members of the Church of England, has a building in the Tudor style. The Female Asylum clothes, maintains, and educates 16 girls, between the ages of 13 and 16, and afterwards provides them with situations of domestic service.

Leicester possesses many valuable charities, some of which are in the trust of the corporation and of the trustees of general and church charities, and others connected with particular parishes. Newton's charity possesses funds amounting to 750*l.* a year, and supports, either wholly or in part, 12 schools in Leicester and other towns mentioned by the testator. The school at Leicester is a substantial brick building, near St. Nicholas's church, with a house adjoining, in which the master lives rent free. He has a salary of 100*l.* a year besides coal and candle, and the use of a large garden. There are 100 boys in the school, sons of poor inhabs. belonging to the established church, who are clothed as well as instructed. Trinity Hospital is an extensive establishment, comprising a chapel, and range of apartments for 80 old men and women, who receive each 3*s.* a week, with other advantages. In the chapel is the tomb of the Countess of Derby, first wife of Henry IV. Wigston's Hospital is a structure of perpendicular architecture in St. Martin's churchyard, erected in 1521, and endowed with estates, the rental of which exceeds 500*l.* a year, but which, it is affirmed, if let like the estates of private individuals, would produce upwards of 5,000*l.* a year. Each of the 24 inmates has an apartment and garden, with 4*s.* a week, and the chaplain, or confrater, has a stipend of 27*l.* a year, with a house and garden. It may be worth mentioning that both Chillingworth and the learned Dr. Samuel Clarke filled this situation. Some smaller almshouses, loan funds, and bequests to a considerable amount, assist in relieving the distress of the poor of the town and neighbourhood.

Leicester is a principal seat of the manufacture of woollen hosiery, including stockings, shirts, caps, and fancy hosiery, and of woollen, Berlin, and Lisle thread gloves. Manufacturing operations are greatly facilitated by a plentiful supply of coal from the Whitwick, Snibston, and Derbyshire coal-fields. A canal, joining the Trent, and several lines of railway, furnish abundant means of transport for manufactured produce, and are of essential service to the town.

Leicester is a bor. by prescription, incorporated by King John, and governed till 1835 by a charter of the 41st Eliz. The old corporation was a self-elected, close, and irresponsible body; and was long distinguished by its political exclusiveness and intolerance. The mun. officers under the Mun. Reform Act are a recorder, mayor, 14 aldermen, and 42 councillors, the bor. being divided into 7 wards. Corporat. revenue, 45,820*l.* in 1862. Assizes and quarter sessions are held here. The bor. has sent two mems. to the H. of C. since the reign of Edward I.; the franchise, till the Reform Act, being vested in the freemen (by birth, servitude, or gift), and the inhab. paying scot and lot. The boundaries of the present parl. bor. include, as already stated, besides the old bor., the liberties (which comprise part of the pars. of St. Mary and St. Margaret, together with the Newarke) and the extra-parochial part, called the Castle-view. Registered electors, 4,616 in 1865. Markets on Wednesday and Saturday: horse and cattle fairs, March, Saturday before and after Easter, May 12, 13, 14, July 5, and Oct. 10.

Leicester occupies the site of Ratæ, an important Roman station mentioned in Antonine's *Itinerary*. A ruin, called the Jewry wall, has been supposed, but on no good grounds, to be the remains of a temple of Janus. Near it a fine Roman pavement was discovered in 1830. Before the Norman Conquest, a castle was built here by the earls of Mercia, which, being demolished by Henry II. in 1176, was restored by Simon de Montfort, earl of Leicester. It afterwards became a favourite residence of the earls and dukes of Lancaster. Several parliaments were held in the great hall in the latter end of the fourteenth and the commencement of the fifteenth centuries. The castle having ceased to be a royal residence after the elevation of Henry IV. to the throne, was allowed to fall into decay; and, in the reign of Charles I., it

Digitized by Google

was pulled down, with the exception of the great hall, which, being new fronted, is now used for the assizes. Two of the gateways also remain, one a fine specimen of the period. During the great civil war, the town was successively occupied by the king and the parliamentary troops. In a meadow near the town are some remains of a monastery of Black Canons, founded in 1143, the revenues of which amounted at its dissolution to 1,062*l.* Cardinal Wolsey expired in this abbey on the 29th Nov. 1530, having been compelled by sickness to take refuge here when on his way to London, to be tried for high treason. The stocking-frame was introduced into Leicester about the close of the seventeenth century, since which time it has been steadily rising in manufacturing importance.

LEIGH, a manufacturing market town and par. of England, co. Lancaster, hund. W. Derby, 12 m. W. Manchester, and 21 m. ENE. Liverpool on the railway from Manchester to Liverpool. Pop. of town, 10,621, and of par. 30,052 in 1861. Area of par. (comprising the townships of West Leigh, Astley, Atherton, Bedford, Pennington, and Tildesley), 11,820 acres. The town, consisting of two chief and other subordinate streets, has a few well-built houses, mixed with others of an inferior character. The parish church is a lofty stone structure, but low and decayed on the N. side: the living is a vicarage in the gift of Lord Lilford. Chapels of ease and district churches have also been erected in the townships of Astley, Chowbent, and Tildesley, the patronage of which is vested in the incumbent of Leigh. There are places of worship for R. Catholics, Independents, Wesleyan and New Connexion Methodists, and Swedenborgians, exclusive of others in the out-townships; and upwards of 4,000 children are taught in the Sunday schools connected with the churches and chapels. The charities of the par. comprise the grammar school, founded in 1655, but poorly endowed, and the free schools of Pennington and Astley, with some apprentice-funds and minor bequests.

Leigh occupies a very respectable station among the cotton-manufacturing towns of Lancashire. The business, which was formerly almost confined to weaving fustians, now embraces all the processes and branches of the cotton and mixed goods manufacture. These branches of industry are greatly promoted by the abundance of coal and lime in the neighbourhood, and by canal and railway communication with Liverpool and Manchester. A branch of the Duke of Bridgewater's canal unites here with the Leeds and Liverpool canal, and the Leigh and Kenyon line connects the town with the Liverpool and Manchester railway, the communication being continued N. by the Bolton and Leigh railway: the latter, 7½ m. in length, was constructed at an expense of 10,000*l.* per mile. The grass lands of the par. are particularly rich, and the dairies round the town yield a cheese held in deserved estimation. Market on Saturday; and fairs, well attended, for cattle, cheese, &c., April 24 and Dec. 7.

LEIGHTON-BUZZARD (or, more properly, Leighton-*Beau-desert*), a market town and par. of England, co. Bedford, hund. Manshead, on the Ouzel, a trib. of the Ouse, 5 m. S. by W. Woburn, and 35 m. NNW. London by the London and North Western railway. Pop. of town, 4,330, and of par. 7,312 in 1861; area of par., including five townships, 8,990 acres. The streets are irregularly laid out, ill paved, and the supply of water is chiefly derived from wells. The town has a fine pentagonal cross in an open area near the market house, supposed to have been erected at the beginning of the fourteenth century: it consists of two stories, and is 38 ft. high. The church, formerly collegiate, is a large cruciform Gothic structure, with a tower and steeple rising from the intersection of its nave and transepts: the living is a vicarage, attached to a prebend in Lincoln cathedral. There are places of worship for Baptists and Wesleyan Methodists, and the Society of Friends (here a numerous body) have a large meeting house. Besides Sunday schools, there is a well-endowed charity school for the gratuitous instruction of poor children; and a large Lancastrian school, for both sexes, supported by voluntary contributions. Wilkes's almshouses, founded in 1630, have an average yearly income of 200*l.*, and furnish lodgings and stipend to eight poor widows. There are several other charitable foundations. Lace-making, formerly a considerable branch of industry in Leighton-Buzzard, has been all but extinguished by the frame-lace trade of Nottingham. Straw-plaiting here, as in other towns of Bedfordshire, employs many females; but the principal trade is in corn and timber, the conveyance of which to the London market is greatly facilitated by the Grand Junction canal and the London and North Western railway, which has a station at this place. One of the largest horse fairs in the S. of England is held on Whit-Tuesday.

LEINSTER, one of the four large provs. into which Ireland is divided, on the E. side of the island, comprising the cos. of Dublin, Kildare, Carlow, Kilkenny, King's and Queen's, Longford, Louth, Meath, Westmeath, Wicklow, and Wexford.

LEIPSIC (Germ. *Leipzig*) a celebrated commercial city of Germany, in the kingdom of Saxony, on the White Elster (a tributary of the Saale), where it is joined by the Pleisse and Parde. and on the railway from Dresden to Halle, 60 m. WNW. Dresden, and 20 m. SE. Halle. Pop. 78,495 in 1861. The appearance of the city, at a distance, is not imposing: it stands in a wide plain, which, though fertile, is unvaried by a single eminence to relieve its sameness. It occupies but a small extent of ground compared with its pop., the houses being very lofty; many of them six stories high, independent of three or four additional in the pyramidal roof; and each story, like the houses in the old town of Edinburgh, usually occupied by a separate family. Few towns exhibit so much of the carved masonry which characterised the old German style of building, joined with so much stateliness. The streets are narrow, but the various markets and squares are large, clean, and neat. Leipsic is far inferior in elegance and beauty to Dresden; but it is better built than Frankfort, and has a decided air of comfort and substantiality. The suburbs are well laid out, and separated from the town by a succession of pleasant gardens, occupying the glacis and other parts of the ancient fortifications. The great market-place, in the centre of the town, is rendered one of the most striking squares in Europe, by the quaint architecture of its surrounding buildings. In one of these, the *Rathhaus*, the allied sovereigns met to congratulate each other after the battle of Leipsic (see *post*). The *Königshaus*, formerly a residence of the electors and kings of Saxony, was occupied by Napoleon in 1813. The Auerbach cellar, at no great distance, is noted as that in which Göthe has laid the celebrated carousal scene in Faust; tradition says that Faust himself used to frequent it. At the SE. part of the town is the castle of Pleissenburg, which withstood the attacks of Tilly in the 30 years' war, long after the town had surrendered. Its lower part is now a wool magazine, and its upper part an observatory 228 ft.

Digitized by Google

high, from the summit of which a commanding view is obtained of Leipsic and its plain. The ramparts of the town have been laid out as public walks, and its gates have been recently removed. The church of St. Nicholas is a handsome square edifice, and of a species of Corinthian architecture; its interior is ornamented with numerous paintings by Oeser, a celebrated Saxon artist of the last century. The other most remarkable public buildings are the *Augusteum* and *Paulinum*, belonging to the university, the cloth hall, booksellers' exchange, and new post office.

The university is the only one in Saxony, and ranks as one of the first, as well as most ancient, in Germany. It was founded in 1409 by some professors and students from the university of Prague. It is divided into 4 nations, the Saxon, Misnian, Franconian, and Silesian; and has faculties of theology, law, medicine, and philosophy. It has about 40 ordinary professors, besides many extraordinary professors teaching modern languages, and other branches of knowledge, who do not belong to the Senatus Academicus.

The greater number of lecture-rooms are here, as in Heidelberg, within the university buildings. Most of the students live within the walls of the Old Paulinum, without reference to their particular department of study; the only qualification necessary to entitle them to the bursary enjoyed there, being an examination as to their proficiency in learning. Some students are allowed both board and lodging in the Paulinum; others are only entitled to a seat at the public table. The university is rich in endowments for stipends to scholars; but with respect to such funds as are applicable to its maintenance and to scientific purposes, it is one of the poorest in Germany. An inventory of its property, which has been made public, states its means towards these latter objects to amount to 5,699 thalers per annum only, not more than 800*l*. It appears, from a statement of its yearly disbursements, that Saxony does not expend as much on this, its sole university, as the Prussian treasury expends upon the least of its provincial universities. The property of the university is valued at 1,100,000 thalers (about 156,000*l*.); and out of this capital, which consists chiefly of house property, besides a small portion of meadow and arable land, some wood, and a few shares of mines, the yearly interest on 650,000 thalers is applicable to benevolent purposes; the interest on the remainder, about 450,000 thalers, is therefore all that is available for the current expenses of the university. The *Augusteum* contains a library of 100,000 vols., and the university has also a museum of natural history, a botanic garden, anatomical theatre, laboratory, and clinical and lying-in establishments. Leipsic has, besides, a civic school, and attached to it a school of general knowledge, opened in 1834, several other superior and free schools, primary schools, numerous learned associations, a public library, with 60,000 printed vols. and 2,000 MSS., and various scientific collections. Several hospitals, orphan, foundling, deaf and dumb, and lunatic asylums, and a house of correction, complete the public establishments. There are some private galleries of paintings and other works of art.

Leipsic is a manufacturing town of considerable importance. Among its chief manufactures are silken and half-silken goods, stockings, leather, hats, playing and other cards, paper haggings, oil cloth, wax lights, starch, soap, sealing-wax, parchment, tobacco, gold and silver articles, liqueurs, and chocolate. Artisans of almost every kind reside in the town. There are also various silk-dyeing and woollen spinning factories; and a large wool market is held annually in May. But the distinguishing characteristic of the commerce of Leipsic is its book trade. Leipsic is, in fact, the grand emporium of the literature of Germany; a distinction of great importance, seeing that the number of readers and writers is greater in that than in any other country of Europe. The literary deluge which commenced in Germany immediately after the peace of 1814, continues to increase. Instead of 2,000 works, which were then about the annual complement, there are now from 8,000 to 10,000. In the German book-trade it is the custom for almost every house, either in the country or abroad, which publishes or sells German books, to have its agent at Leipsic, who receives and distributes its publications in the same way that the London booksellers receive and distribute English publications. The great sale of new works takes place at the Easter fair. The fairs of Leipsic are the most celebrated in Germany. They are held at the new year, at Easter, and at Michaelmas. The last two are the most important. They should close in eight days, but they generally last three weeks; and, while they continue, Leipsic is the great mart of Central Europe for all kinds of merchandise. Of late, however, these fairs have been greatly falling off, both in the number of dealers and purchasers, and in the amount of their transactions. The cause is to be sought in the simple fact that, as railways and other cheap and easy means of national and international intercommunication come to extend, these meetings of merchants, brought about at a great loss of time and personal inconvenience, become unnecessary, their business being transacted, in an infinitely more commodious way, by travelling agents.

The following table shows the quantities of goods in centners—1 centner = 110¼ lbs. avoirdupois—the manufacture of the states of the German Customs' Union, brought to the Leipsic fairs in the year 1864:—

Description of Goods	New Year's Fair	Easter Fair	Michaelmas Fair
	Centners	Centners	Centners
Cotton Manufactures . .	14,696	29,103	30,557
Iron Manufactures . .	2,338	4,875	4,790
Yarn (Cotton and Wool)	871	1,637	1,618
Glass and Mirrors . . .	480	1,803	2,821
Fine Wood Manufactures	224	1,069	2,132
Instruments	304	612	838
Made-up Clothes . . .	277	862	1,270
Copper and Brass Manufactures	197	436	643
Hard and Small Wares .	1,289	8,289	9,516
Leather	14,299	29,043	32,487
Leather Wares	779	2,644	4,290
Linen Manufactures . .	4,780	10,984	11,128
Paper	1,869	1,743	1,155
Porcelain and Stoneware	977	2,948	3,826
Furs	189	1,422	1,140
Silk Manufactures . . .	765	2,220	2,413
Mixed Silk Manufactures	201	769	632
Straw Manufactures . .	17	588	131
Carpets	102	230	391
Woollen Manufactures .	28,659	44,307	60,986
Weighing Machines . .	..	334	306
Other Articles	848	2,152	1,886
Total . . .	74,161	148,070	174,956
Grand Total .	397,187 Centners		

The Leipsic and other German booksellers have, since 1834, erected an exchange for their exclusive use. The building is three stories high, 112 ft. in length, and 48 ft. in depth; and the cost of its erection was 5,000*l*.

Leipsic is the cap. of the prov. and district of

Digitized by Google

same name, and the seat of the judicial courts. At the end of the 10th century it was only a little Slavonian village; but, during the 12th, it was fortified, and its 2 principal fairs established. Its new year's fair commenced in 1458, and its book trade originated in 1545.

The vicinity of Leipsic, and, indeed, the town itself, was, in October, 1813, the scene of a most tremendous conflict. Napoleon having concentrated at this point such of his forces as he had been able to collect from the different parts of Germany, to the amount of about 135,000 men, was attacked on the 16th by the allied army, under Prince Schwartzenberg, Blucher, and other generals, accompanied by the emperors of Russia and Austria, and the king of Prussia. The allied forces amounted to at least 250,000 men. The struggle, which was fierce, obstinate, and bloody in the extreme, terminated at nightfall without any decided advantage to either party. It was renewed on the 18th, when a Saxon brigade went over, during the heat of the action, from the French to the Allies, which, combined with their superior force, gave the latter an advantage that all the genius of Napoleon, seconded by the valour and devotion of the French, could not counteract. Though the French maintained their ground during the day, a retreat became indispensable; and, owing to the accidental blowing up of a bridge, a part of the French army was cut off; so that Napoleon lost 25,000 men, who fell into the hands of the Allies as prisoners, exclusive of the far greater number who fell in the previous battles. Prince Poniatowski, who may emphatically be said to have been the last of the Poles, after displaying prodigies of valour, lost his life in the retreat on the 19th, having been drowned in attempting to cross the Elster. This great victory completely emancipated Germany from the yoke of the French, and opened the road to Paris to the Allies.

LEIRIA, a city of Portugal, prov. Estremadura, on the small river Lis, 42 m. SSW. Coimbra, and 72 m. NNE. Lisbon. Pop. 3,520 in 1858. The town, which, though in a fine country, is small and wretched-looking, has no fewer than 19 parish churches (one of which is likewise a cathedral), and 3 convents. A considerable fair is held here on the 25th of March.

LEITH, a sea-port and parl. bor. of Scotland, co. Mid Lothian, on both sides of a small river of the same name, at its confluence with the Frith of Forth, on a flat sandy shore, 2 m. N. by E. of the centre of Edinburgh, of which city it is the port, and with which it is connected by two lines of railway. Pop. 33,628 in 1861, against 25,984 in 1841. The river divides the town into two portions, called N. and S. Leith. They are connected by several drawbridges, and by an elegant stone bridge at the W. extremity of the town. Leith is united to Edinburgh besides by its two lines of railway—one reaching it in a wide easterly sweep, *via* Portobello—by a road, called Leith Walk, so filled up with buildings that it may be regarded rather as a street than a road. Part of the town of Edinburgh on the W. stretches into the parish of S. Leith. The buildings in the older parts of Leith are huddled together without order or regularity, and the streets and lanes are, for the most part, narrow, crooked, and filthy. The new streets to the S. and E., however, form striking exceptions, being not much inferior to the best in Edinburgh. In S. Leith, the only two leading streets (Constitutional Street and the Kirkgate) branch off from the N. termination of Leith Walk in the form of an acute angle. The street called the Shore, fronting the harbour on the S., is lofty and substantial. On the SE. of S. Leith are Leith Links, or downs, a common belonging to the bor., ¾ m. in length, by nearly ¼ m. in breadth. The best buildings are erected on its skirts, chiefly on its N. and W. sides. Both N. and S. Leith are lighted with gas, and supplied with water by the Edinburgh Water Company. The length of the bor., from E. to W., is 1¼ m., the mean breadth ½ m. The mean and dirty village of Newhaven, ½ m. to the W., is inhabited almost exclusively by fishermen, who chiefly supply Leith and Edinburgh with fish.

The public buildings in Leith are numerous. The Trinity-house, of Grecian architecture, on the W. side of the Kirkgate, was founded in 1555, and rebuilt in 1817. The par. church of S. Leith, opposite the Trinity-house, built in the 16th century, has recently been much improved both internally and externally. The parish church was at Restalrig, 1 m. E. of the bor., till the Reformation, when it fell a sacrifice to the destructive zeal of the Presbyterians; since which the present building, originally a chapel dedicated to St. Mary, has served that purpose. The Free church of St. John in Constitution Street, originally erected as a *quoad sacra* church, is a spacious Gothic edifice: it has a lofty octagonal spire, with two schools attached to it, and forms one of the most imposing objects in the bor. The present parish church of N. Leith is a modern structure of Grecian architecture, on an elevated situation, with a spire 158 ft. high. A handsome place of worship, in connection with the establishment, was erected in 1841 in S. Leith, and endowed by Sir John Gladstone, of Fasque, a native of the bor.; it has attached to it a school and a hospital for females labouring under incurable diseases. The buildings, which are in the Gothic style, form three sides of a square, and cost about 21,000*l.*, exclusive of the endowment. Among the other public buildings may be mentioned the gaol, a new edifice of Saxon architecture; the town-hall, in Constitution Street, erected in 1828, perhaps the most chaste and elegant specimen of modern architecture in the town; the Exchange Buildings, a large Grecian structure, extending to 180 ft. in front, and comprising an hotel, assembly rooms, and a reading room; the Leith bank; the Custom-house, close to the harbour on the N.; the Nautical School, opened in 1853; the High-school, at the S. corner of Leith Links; Dr. Bell's school; various dissenting chapels, particularly an episcopal one; and the Seafield Baths, erected by a joint-stock company in 1813, at the E. extremity of the town, at an expense of 8,000*l.*

In regard to religious instruction, in addition to the two parish churches and Sir John Gladstone's chapel, 5 places of worship belong to the Free Church, four to the Associate Synod, and one respectively to the Relief, Independents, Methodists, R. Catholics, and Episcopalians. The living of N. Leith is, Greenock perhaps excepted, the highest in the Scottish church, being about 800*l.* a year, arising principally from the tithe of fish landed at Newhaven, and from the rent of the glebe, which is *feued* or let on building leases. The church of S. Leith is collegiate, or is served by two ministers. There are several schools for the instruction of the poorer classes, inc. a school, attended by about 700 children, founded by Dr. Bell of Madras, who left a bequest of 10,000*l.* for that purpose. There are several subscription libraries, and a philharmonic society for the cultivation of music, both vocal and instrumental. Dr. Henry Hunter, translator of Lavater's 'Physiognomy,' and John Logan, author of 'Sermons and Poems,' were successively ministers of S.

Digitized by Google

Leith; and John Home, author of 'Douglas,' and Hugo Arnot, the historian of Edinburgh, were natives of the bor.

With the exception of the Trinity-house, Bell's bequest, and Gladstone's hospital and school, Leith has no important charities. The Trinity-house, the funds of which are devoted to the relief of decayed sailors or their widows, supports, by monthly or quarterly payments, from 170 to 180 pensioners of various classes, besides assisting sailors who have been shipwrecked, or are otherwise in distress. The recipients of the charity formerly lived in the house, but now they are all out-pensioners. There was a charity called King James's Hospital, for the support of old women; but the building has disappeared, though the funds, which are trifling, are still devoted to their original object. The other charitable institutions are the humane society, dispensary, and casualty hospital; the society for the relief of the destitute sick, and Leith boys' charity school. There are various friendly societies.

Leith labours under great disadvantages in respect to its port. At low water, the tide recedes above a mile from the shore; and the stream of the rivulet by which the town is bisected is so tiny, that it is even insufficient to clear away the mud from the harbour. Various efforts have been made to overcome these natural difficulties, but hitherto with no very marked success. In 1720, a dock was formed on the E. side of the river, and that portion of the present pier which is of stone was erected; and in 1777 a small quay, called the custom-house quay, was built. But the increasing commerce of Leith soon rendered these trifling improvements quite inadequate to the demands of the port; and accordingly, in 1799, the magistrates of Edinburgh, who had the uncontrolled management of all public matters connected with the town and port of Leith, obtained an act of parliament, authorising them to borrow 160,000*l.* for the construction of wet docks. In consequence two docks were constructed on the N. side of the harbour, between 1800 and 1817, each measuring 250 yards in length by 100 in breadth, and comprising together about 10¼ imp. acres. Attached to them are three graving-docks, each 136 ft. long by 45 ft. wide at bottom; and 150 ft. long by 73 ft. wide at the top; with an entrance 36 ft. wide. At average spring tides the depth of water in the docks is 16 ft. 9 inches, and at neap tides 4 ft. less. The total expense was 285,000*l.*, of which 265,000*l.* was borrowed by the city from government, at 5 per cent.; of which 3 per cent. was to be paid annually, and 2 per cent. to be accumulated as a sinking fund for the liquidation of the debt. The city gave as security a mortgage over all their Leith property, and a concurrent claim, with other creditors, over the entire municipal property of Edinburgh, besides ceding certain effects to the admiralty. In addition to these great works, others were undertaken in 1831-32, viz. an addition to the E. pier, of the extent of 500 yards, and the formation of a covering bulwark on the opposite side, 1,500 ft. in extent. The expense of the former (28,000*l.*) was borne by the city of Edinburgh; the latter (12,000*l.*) by government. The object of these works was to deepen the water in the channel, which was effected to the extent of about 2 ft. But, after this had been done, the harbour was all but dry at low water, and there were only 17 ft. water over the bar at its mouth, at high water spring tides, and but 14 ft. at neap tides. In fact, no vessel of above 400 tons burden could approach the harbour at the highest tides, and sometimes not even vessels of that burden. Under these circumstances it was determined to make still further improvements. A statute having been passed in 1839, vesting the management of the harbour and docks in parliamentary trustees, and authorising the expenditure of certain sums on their improvement, various extensive works were subsequently carried out. They comprised an addition of 2,000 ft. to the E. pier, and of 2,100 to the W. do.; and the construction of a new wet dock of nearly 5 acres in extent, fitted to accommodate the largest class of steam-ships. The object of carrying out the piers to so great a distance was to secure such a depth of water as to make them accessible at all times of the tide. This was secured so far that there is now 8 ft. water at low ebb, which may be increased to 14 ft. by dredging. At their extremities the piers approach to within about 250 ft. of each other. The W. pier has a railway which communicates with the Edinburgh, Perth, and other railways; so that vessels may, by using it, either discharge the whole of their cargoes, or be lightened so that they may come up to the inner port.

In addition to this harbour at Leith, Edinburgh possesses another at Granton, one mile westward, connected with it by railway. Granton harbour was constructed at the expense of the Duke of Buccleugh; the pier projects into the sea about 1,700 ft., shaped like a T, with its head to the N., having harbours and landing-places on both sides. The harbour is protected by a large breakwater, which adds to the accommodation for and security of shipping.

The commerce of Leith, from its being the port of Edinburgh, is very considerable, and has been slowly but steadily improving. It carries on a considerable trade with Australia, the E. and W. Indies, China, the Mediterranean, Canada, and the United States; but its principal foreign trade is with Holland and the N. of Europe. With regard to its domestic trade, there are various companies which employ steam and other vessels in trading to London, Hull, Newcastle, Liverpool, Greenock, Glasgow, Aberdeen, Wick, Helmsdale, Orkney, Shetland, Dundee, Stirling, and other British ports, and to Hamburg and other continental ports. The gross amount of customs' dues collected at Leith amounted, in 1845, to 520,124*l.*, in 1849 to 545,885*l.*, in 1859 to 512,872*l.*, in 1861 to 472,433*l.*, and in 1863 to 439,706*l.* There belonged to Leith in January, 1850, 185 sailing vessels, of the aggregate burden of 20,625 tons, ex. 21 steamers; while, on the 1st of January, 1864, the registered shipping amounted to 136 sailing vessels, of 23,614 tons, besides 63 steamers, of 13,984 *tons burden*. Ship-building has long been carried on to a considerable extent, and employs more capital than any other business in Leith. There are various extensive rope and sail works, distilleries, breweries, and iron foundries.

Leith existed as a town as early as the 12th century. The old church of N. Leith, long disused as a place of worship, was founded in 1493. It is now in ruins, but its cemetery is still used as a burial ground. A bridge over the river, built, in 1493, by Robert Bellenden, abbot of Holyrood-house, was used till 1788, when the first drawbridge was erected. Leith is of no small note in the history of Scotland, having been the scene of more military service than perhaps any other town in the kingdom. It was once walled on the land side, but all traces of its fortifications have disappeared. Leith was taken possession of by Cromwell, who laid a heavy assessment on the inhabitants, and erected a citadel, of which some portions still remain. It formerly had races, which took place at ebb-tide, on the sands E. of

Digitized by Google

the town; but they were transferred to Musselburgh Links in 1816. A martello tower on the sands, at some distance from the pier-head, was built, at an expense of 17,000*l.*, for the defence of the port, during the French war: the port is farther defended, by a battery of nine guns, a little to the W. of Cromwell's fort.

Leith was long dependent on Edinburgh. So early as the 14th century, the latter obtained a grant from king Robert Bruce, of its harbour and mill; a right which was confirmed or extended by subsequent grants either from the crown, or Logan of Restalrig, the baronial superior of the place. The municipal government of the burgh was, as already stated, substantially vested in the town-council of Edinburgh, who had the entire management of the port. But the Scottish Bor. Reform Bill, which came into operation in November, 1833, totally changed this state of things, and conferred on the inhab. of Leith what they had long struggled to obtain, the uncontrolled direction of their own municipal affairs; vesting them in a provost, 4 bailies, and 10 councillors, chosen by popular election. This act did not, however, affect the rights of Edinburgh over the harbour and docks, or the revenue arising therefrom. But the Edinburgh and Leith Agreement Bill (July, 1838) made each town, in every respect, independent of the other. By this statute, the affairs of the harbour and docks are vested in 11 commissioners (of whom 5 are nominated by her majesty's treasury, and 3 by the town-councils of Edinburgh and Leith respectively), whose proceedings, however, require the sanction of the treasury. The debt on the docks due to government, at the date of the passing of the act, was 228,374*l.*; and the commissioners were empowered to borrow a sum not exceeding 125,000*l.* (the government postponing the security granted to it *pro tanto*), for the improvement of the port, provided the whole particulars and estimates receive the authority of the treasury. Government also postponed its claims to such annual sums as might be required for maintaining or extending the efficiency of the port.

Previously to the passing of the Reform Bill in 1832, Leith had no parliamentary representative. But that act conferred on it, with Portobello and Musselburgh, the right to send 1 mem. to the H. of C. Registered voters, 2,501 in 1865.

LEITMERITZ, a fortified town of Bohemia, cap. circ. of its own name, on the Elbe, 33½ m. NNE. Prague, on the railway from Prague to Dresden. Pop. 7,458 in 1861. The town is well built, and has a handsome cathedral and other churches, a gymnasium, a theological seminary, a high school and girls' school, with manufactures of straw hats and chicory, and a considerable traffic in agricultural produce, and fish caught in the Elbe. The wines of its circle are the best of any in Bohemia, which, however, is no very high recommendation. It is a bishop's see, and the seat of a circle council.

LEITRIM, a marit. co. of Ireland, prov. Connaught, having N. Donegal Bay, E. Fermanagh and Cavan, S. Longford, and W. Roscommon and Sligo. It is long and narrow, stretching NNW. and SSE. nearly 50 m. Area 376,212 statute acres, of which 128,167 are mountain and bog, and 25,568 water, including Lough Allen, near the source of the Shannon, which is also in this co. Leitrim is wild, and generally mountainous; but in the valleys and low grounds the soil, which is incumbent on limestone, is mostly fertile. Property in very large estates. Tillage farms small and not unfrequently let on partnership leases. Agriculture improving, but, till recently, in an excessively backward and depressed state. There is no rotation: corn follows corn as long as the soil will bear any thing: or, if the series be interrupted, it is only to make way for potatoes or flax; and, when the land is exhausted, its recovery is left to the *vis medicatrix naturæ*. Clover and turnips are nearly unknown; and here, as in most other districts of Ireland, the potato is the all but sole dependence of the bulk of the pop. The habitations of the occupiers are mostly miserable huts; and, except in a few instances, office-houses, in the proper sense of the term, can hardly be said to exist. Some coarse linen is made for home consumption. Leitrim contains 5 baronies and 17 pars. It sends 2 mems. to the H. of C., both for the co. Registered electors, 2,389 in 1865. At the census of 1861, the co. had 18,691 inhab. houses, 19,541 families, and 104,744 inhabitants; while, in 1841, Leitrim had 25,912 inhab. houses, 27,192 families, and 155,297 inhabs.

LEMBERG (Polish *Lwow*; Latin, *Leopolis*), a city of the Austrian dominions, cap. Galicia, on the Peltew, a tributary of the Bug, 185 m. E. by S. Cracow, and 370 m. NE. Vienna, at the terminus of the Vienna-Cracow and Lemberg railway. Pop. 70,384 in 1857. Lemberg was formerly an important fortress; but the demolition of its fortifications was begun early in the last century, and completed under Joseph II., when its ramparts were planted with trees, and laid out in public walks. It has still, however, 2 castles, one within the town, and the other, the ruined castle of Lowenburg, on an adjacent eminence to the N. The city proper is small, but it has 4 suburbs, each equalling it in extent, and comprising the handsomest buildings. The lofty towers and cupolas of the cathedral and other churches, and the massiveness of its public structures, give Lemberg an air of grandeur, particularly when viewed from a distance. The city has narrow dirty streets and old houses, but the suburbs are generally well built, and have several wide, straight, and tolerably well paved streets, and some spacious squares. The houses are mostly of freestone, two or three stories high, but roofed only with shingles. The chief public edifices are the palace of the Armenian archbishop in the Cracow suburb; the Dominican church, which has a fine monument by Thorwaldsen; one of the two synagogues, the old Jesuits' college, the new council-house, the governor's residence, the general hospital, and the large barracks in the Zolkiew suburb. Lemberg has upwards of 20 churches, including a Greek and an Armenian cathedral, 9 Rom. Cath. par. churches, and Lutheran and Calvinist meeting-houses; a Greek, an Armenian, and 6 Rom. Cath. convents, 5 hospitals, and a theatre. Its university, established in 1784, and remodelled in 1817, has, on an average, about 1,500 students. The town has also an imperial academy, a Rom. Cath. and a Greek ecclesiastical seminary, 2 gymnasia, 2 high schools, a school of arts and sciences, a normal school, a Jewish female and many elementary schools; a provincial museum, chiefly for the natural and other products of Galicia, and a valuable public library, said to be rich in works in Polish literature. It is the seat of the provincial government; of the courts for the city and circle, and a court of appeal for the prov.; and has Rom. Cath., united Greek and Armenian archbishops, and Lutheran and Calvinist superintendents.

Lemberg has manufactures of cotton and woollen stuffs, with dye works, distilleries, tanneries, and a few printing establishments; but it is much more a commercial than a manufacturing city. Next to Brody, with which it has a constant intercourse, it is the chief trading town of Galicia.

Digitized by Google

Its position, on the high road from Odessa to Silesia and Warsaw, and on the railway to Cracow and Vienna, renders it an emporium for much of the produce of S. Russia, Moldavia, and Wallachia, in its transit to Central Europe. Large fairs are held at Lemberg, the most important is that called Drei Königs Messe (Three Kings' Fair), which lasts six weeks from Jan. 14, and attracts a vast concourse of Jewish, Christian, and even Mohammedan merchants. The Russians bring to the fairs large quantities of peltry from Siberia and Tartary, which they exchange for the woollen and cotton goods and hardware of Austria. Large herds of cattle arrive at Lemberg from Moldavia and Bessarabia, being thence distributed to different parts of Austria and Silesia. Lemberg is also one of the principal corn-markets of the Austrian empire. Corn is sent from it to Przemysl, on the San, where it is shipped for Dantzic; and it is also, though more rarely, sent from it to some of the nearest stations on the Dniestr, for shipment for Odessa.

Lemberg was founded in the 13th century. It was taken by Casimir I. of Poland, in 1340. It was besieged in 1648 by the famous Cossack chief, Bogdan Khmielnicki, who threatened its extermination, but withdrew on receiving a large ransom. In 1672 it was taken by the Turks, and in 1705 it was taken and sacked by Charles XII. of Sweden, when it ceased to be of much consequence as a fortress. It came into the possession of Austria in 1772, since which it has progressively advanced in wealth and population.

LEMGO, a town of Germany. See LIPPE-DETMOLD.

LEMNOS (Turk. *Stalimene*), an island of the Grecian Archipelago, belonging to the dom. of the Porte, 43 m. SE. the promontory of Mount Athos, and about the same distance W. from the mouth of the Hellespont, Mount Therma being in lat. 39° 53′ 46″ N., long. 25° 8′ 32″ E. Area about 150 sq. m. Pop. said to amount to 12,000, chiefly Greeks. It is of an irregular quadrilateral shape, being nearly divided into two peninsulas, by two deep bays or indentations of the sea, Port Paradise on its N., and Port St. Antonio on its S. side. The latter, which is capacious and land-locked, has good anchorage for large ships. The E. side presents to the sea a bold rock, *Monte Santo*, called by Æschylus the Ἑρμαῖον λίπας Λήμνου, in his brilliant description of the watch-fires between Mount Ida and Mycenæ: a rocky bank projects from it upwards of 8 m. into the sea. The appearance of Lemnos is far from picturesque: barren, rocky, though not very high, mountains cover about two-thirds of its surface, and scarcely a tree is to be seen, except in some of its narrow valleys, which are verdant and fertile, especially on its W. side. The whole island bears the strongest marks of volcanic action: the two highest mountains have craters; there are several thermal springs, and the rocks in many parts resemble the burnt and vitrified scoriæ of furnaces. One of its mountains, indeed, appears, from a fragment of a Greek poet preserved by Nicander, to have been constantly emitting flame and smoke; and hence we may account for the fact of this island being sacred to Vulcan, who, when precipitated from heaven, is said to have fallen on its hospitable shores:—

> 'Lemnos cara deo: nec famæ notior Ætna
> Aut Lipares domus.'
>
> Val. Flaccus, lib. ii. line 95.

This island has been long famous for its furnishing a peculiar silicious earth or bole, celebrated for its detergent and medical qualities, called *Terra Lemnia* and *Terra Sigillata*, from its being impressed with a peculiar seal or mark. Galen visited the island in the second century, for the express purpose of making himself acquainted with this earth; and he states that it was then dug up with many religious ceremonies. (De Simpl. Medic., lib. ix.) This practice has been continued down to our own times, or, at all events, to a very late period. The earth is dug up on the 6th of August, in the presence of the chief men of the island: when a sufficient quantity is extracted, the hole is filled up; the bags or parcels are then sealed, and, a few being sent to the grand seignior, the governor is accountable for the value of the others. But the reputation of the Lemnian earth is now much fallen off, and the demand for it has proportionally declined. (Ancient Universal History, viii. 346, 8vo. ed.)

At present the high grounds of the island are grazed by sheep, but the W. and S. valleys produce corn, good grapes and figs, cotton and mulberry trees. The climate, however, is too cold to ripen oranges and lemons, and the island frequently suffers from the locust.

The wine of Lemnos is of two sorts, both red; the best fetches about 8 paras per oke, or 2*s.* 3*d.* per bottle. It produces more than sufficient grain for its own consumption, the rest, with some wine, being sent to Mytilene; but its chief exports are ewe-milk cheese, silk, cotton, and wool. The inhabs. are divided between agriculture and fishing, and the women (celebrated for their beauty) are employed in weaving cotton cloths. The Turks resemble those of the other islands, both in dress and manners; but the costume of the Greek women is remarkable as well as picturesque. It consists of a short scarlet jacket, with long sleeves, loose in front, and reaching only a few inches down the back, very short petticoats, white calico trowsers gathered at the ankles, yellow Turkish slippers, and a white handkerchief tied like a turban round the head. The principal town Castro (the ancient *Myrina*), on the W. side, contains three Greek churches; and its port, or rather cove, is defended by a little pier, and commanded by a citadel on the overhanging rocks. Ships are built here, and the natives are excellent seamen. The other port is St. Antonio on its S. side, at the bottom of the bay already noticed.

Lemnos, according to Pliny, had a labyrinth more remarkable than that of Crete or of Egypt. It was supported by 140 columns, and its gates were so admirably adjusted, as to be turned by a child. '*Quarum in officina turbines ita librataæ pependerunt, ut puero circumagente tornarentur.*' It was the work of three architects, one of whom, Theodorus, was a native of the island. Its remains are said to have been extant in Pliny's time. (Hist. Nat., lib. xxxvi. cap. 13.) No certain traces of this famous edifice have been discovered in modern times; but this is probably a consequence of the island having been seldom visited by scientific travellers, or of the changes occasioned by the action of volcanoes, or other natural convulsions.

The first inhab. of the island are said to have been Thracians. In the reign of Thoas, the only Lemnian king mentioned in history, the Lemnian women are said, in imitation of the Amazons, to have treacherously killed all the males (Herodot., lib. vi. cap. 138); and hence any premeditated and detestable murder, or other crime, was long after called a 'Lemnian action.' Miltiades reduced the Lemnians under the sway of Athens.

LENA, a large river of N. Asia, the principal in E. Siberia, extending through 19° N. lat., and falling into the Arctic Ocean. It rises in lat. 42° 30′ N., and long. 106° E., on the W. slope of the

Digitized by Google

lofty granitic range, skirting the NW. shore of the lake Baikal; and from the source as far as Ust Kulsk, a distance of 350 m., it pursues a N. course; but at that point it is turned E. by a chain of hills, and runs in a very tortuous channel ENE. for about 1,000 m. to Yakutsk, the metropolis of E. Siberia, where it is a wide and noble river. Its general course from Yakutsk is N. down to the apex of the extensive delta formed at its mouth, the distance between these two points being about 700 m. The entire length of this gigantic river is probably somewhat more than 2,100 m. The basin of the Lena covers an area of about 800,000 sq. m., the principal tributaries above Yakutsk being the Kirenga, Vitim, and Olekma, on its E. side, while below that city, the main stream is joined E. by the Aldan, rising by several sources in the Stanovoi range, and W. by the Bilui, which rises on the E. side of the hills dividing the Lena basin from that of the Yenisei. The Lena has an extremely tortuous course with a sluggish stream, and encloses numerous islands. Mr. Dobell, who travelled up the stream from Yakutsk to Irkutsk, describes it as one of the safest navigable rivers, of its size, in the whole world, its course being only very rapid in the spring, at the breaking up of the frost, when numerous tributary rivers and torrents, bursting their icy fetters, rush with impetuosity into the maternal bosom of the Lena. The river, at these times, is a truly sublime spectacle, particularly where it passes through what are called *the gates*, which confine it in a narrow channel between rugged cliffs rising perpendicularly nearly 300 ft. above the stream. The dashing and eddying of the stream in its course from one side to the other is terribly grand; and yet the native boatmen manage to descend the river without injury, even at this season. The forests on its banks are principally of spruce and the yellow pine, both of a large growth; and the soil on the mountains appears rich and good, and capable of producing grain of all sorts. Most of the farming settlements, however, are either on the level spots along the edge of the river, or on the declivities of the mountains. Below Yakutsk, the face of the country is very different: the river rolls thence through vast and almost uninhabited plains, covered with snow and ice, which never wholly melts, and beneath which have been found the carcases of mammoths, rhinoceroses, and other fossil animals.' (Dobell's Siberia, ii. 68–82.)

LENHAM, a decayed market town and par. of England, co. Kent, lathe of Aylesford, hund. Eythorne, near the source of the Len, a trib. of the Medway, 13 m. W. Canterbury, and 40 m. ESE. London. Pop. of par. 2,016 in 1861. Area of par. 6,890 acres. The town consists of a principal street, on the high road between Maidstone and Canterbury, intersected by another of smaller size. The church has a square tower and 16 curiously carved stalls in its interior, which are supposed to have belonged to the abbot and monks of St. Augustine, at Canterbury, who had large estates within the par. The market has been long disused, and the inhab. are almost entirely engaged in agriculture.

LENTINI (an. *Leontium*), a town of Sicily, prov. Syracuse, on a hill, washed by the river Porcari (an. *Lissus*), near the lake of Lentini, or Biveri, 14 m. SSW. Catania, and 20 m. NW. Syracuse. Pop. 7,962 in 1862. The country round is now, as of old, extremely fertile; and the inhab. are chiefly employed in its culture, in the fishery on the lake, and the sale of the produce so obtained. In the winter season the lake, which is the largest in Sicily, is about 19 m. in circ.; but in summer its circ. is reduced to 8 or 9 m., the exhalations from the mud that is thus left dry rendering the town and district very unhealthy. The fishery yields its proprietor, the prince of Butera, a considerable sum.

The ancient city of Leontium, founded by a colony of Chalcidians in the first year of the 13th Olympiad (Thucydides, lib. vi.), most probably occupied the exact site of the modern town; but the ground has been so much shaken and changed by natural convulsions, such as that of the great earthquake of 1693, that few vestiges of the ancient city can now be traced. When it was taken by the Romans under Marcellus, it was one of the principal cities of Sicily, as is sufficiently evinced by the notices of it in various writers, and especially by the detailed description which Polybius has left of its state at that period. 'The city of Leontium,' says he, 'considered in its general position, faces the N. Through the middle of it runs a level valley, which contains the public buildings allotted to the administration of government and justice, and, in a word, the whole that is called the forum. The two sides of the valley are enclosed by two hills, which are rough and broken along their whole extent. But the summit of these hills is flat and plain, and is covered with temples and houses. There are two gates to the city: one of them is in the southern extremity of the city, and conducts to Syracuse; the other is on the opposite side, and leads to those lands so famed for their fertility, called the Leontine fields. Below the hill that stands on the W. side of the valley flows the river Lissus; and on the same side, likewise, there is a row of houses built under the very precipice, and in a line parallel to the river. Between these houses and the river lies the road that has been mentioned.' (Hampton's Polybius, iii. 105.)

In his third oration against Verres, Cicero repeatedly refers to Leontium, and celebrates the extraordinary fertility of its territory, '*Campus Leontinus caput est rei frumentariæ.*' (In Verrem, lib. iii. cap. 18.) The famous orator, Gorgias, whose eloquence was instrumental in persuading the Athenians to undertake their fatal expedition against Sicily, was a native of Leontium.

LEOMINSTER, a parl. bor., market town, and par. of England, co. Hereford, hund. Wolphy on the Lugg, an affluent of the Wye, 11 m. N. Hereford, 121 m. WNW. London, and 157 m. by Great Western and Shrewsbury and Hereford railway. Pop. 5,658 in 1861. Area of par. and parl. bor., which are co-extensive, 9,290 acres. The town consists of a good principal street, about ¾ m. long, intersected by narrow and inconvenient lanes. There are several handsome private residences, and being well paved and well lighted, it has, on the whole, a respectable appearance. The new town-hall and corn-exchange is in the Gothic style, 160 ft. long.; the old town-hall, called the butter-cross, in consequence of the butter-market being held in the lower part, is an odd-looking structure of timber and plaster, standing on oak pillars, with Ionic capitals. A market house was erected in 1803, near which is a small gaol. The parish church, which exhibits the architecture of several periods, has a tower 100 ft. high. The Baptists, Wesleyan Methodists, Moravians, and the Society of Friends have each places of worship, and well-attended Sunday schools are attached to the church and to various chapels. A free grammar-school, founded and endowed by Queen Mary, 'has entirely ceased to furnish gratuitous education, and has become a private school: the corporation appoints the master; but, beyond paying him an annual stipend of 20*l.*, they have no concern in the management of the school.'

Digitized by Google

(Mun. Corp. Rep.) An almshouse, dispensary, and house of industry are the only other public establishments. The gross annual value of real property assessed to income tax was 19,168 in 1857, and 33,502*l.* in 1862.

Leominster was formerly one of the principal seats of the glove manufacture, but latterly the business has been on the decline. Hats are made, and coarse woollens, but the latter only to a small extent. Tanning is extensively carried on. The principal dependence of the town is, however, on its retail trade with the adjacent county. Coal is brought from Shropshire, partly by canal and partly by railway, from the Clee Hills. The land in the borough and in the out-parish is in a great degree held, often in small portions, by the residents in the town. The country round produces, besides the common agricultural produce, apples and hops in great abundance. Some lands and houses belonging to the corporation are let for long terms, subject to three joint lives, but renewable, as the lives fall in, for fines certain. There are some leases for terms of years; but the greatest number of holdings are from year to year, the leases for years expiring, and the tenant holding on. A considerable quantity of the land is occupied by the proprietors.

Leominster is a bor. by prescription, and received several charters between 1554 and 1706, the governing charter till 1835 having been 36 Charles II. The mun. officers are, a mayor, 4 aldermen, and 12 councillors. Quarter and petty sessions are held in the town-hall, and there is a court for the recovery of debts under 100*l.* The parl. franchise was granted in 23 Edward I., since which time the bor. has sent 2 mem. to the H. of C., the voters, down to the passing of the Reform Act, being resident burgesses and inhab. paying scot and lot. The Boundary Act made the parl. bor. co-extensive with the par. Reg. electors, 349 in 1865. Markets on Friday: large fairs for cattle, farming produce, &c., Feb. 13, May 13, Sept. 4, and Nov. 8.

LEON, an ancient kingdom of Spain, between lat. 40° 10′ and 43° N., and long. 4° and 7° W.; bounded N. by Asturias, E. by Old Castile, S. by Estremadura, and W. by Galicia: greatest length, 200 m.; breadth, 138 m.: area, 10,573 sq. m. The old kingdom comprises the modern provinces of Leon, Zamora, and Salamanca. The whole of this region is included in the basin of the Douro, and is intersected by several large tributaries of that river, the principal being the Pisuerga, Elsa, and Tormes. The N. and S. districts are mountainous, the former comprising various offsets from the Asturian chain, and the latter being skirted by the central chain of the peninsula, two of the highest summits of which are the Sierra de Gredos, 10,552 ft., and the Pena de Francia, 5,689 ft. This hilly country produces the loftiest and best oaks in Spain, and is rich in iron ore, some portion of which is smelted and made into hardware goods. The inhab. of the Asturian mountains are a distinct race, robust, and simple in their manners, engaged during summer in pasturing cattle, mules, and the migratory flocks of sheep that pass at that season through their country, and at other times employed in tillage and in collecting Iceland moss, which is here very abundant, madder, and medicinal plants, which they sell in the markets of Leon and Madrid.

The less elevated parts of Leon contain many tracts which afford excellent pasture, and dairy-farming might be pursued with great profit, were it not for the want of enterprise, security, and even tolerable roads. Maize, olives, wheat, and flax are cultivated in some parts; but there is a great want of irrigation. The wine of Salamanca is said to be of good quality, but that raised on the borders of Galicia is execrably bad. Leon has no public manufactures worth notice, except that of hardware; but there is a good deal of domestic manufacturing of woollen and linen stuffs for home consumption. The canal of Castile, constructed about fifty years ago, passes northward up the valley of the Pisuerga; but it was never finished, and contributes very little to the advantage of the districts through which it passes.

The kingdom of Leon was anciently inhabited by the *Vettones* and *Callaici*, and formed a part of the Roman *Tarraconensis*. Don Pelayo and his successors during the 8th century, formed this district into a kingdom, called after its capital, and connected with that of Asturias. It was first added to Castile in 1037, but continued in an unsettled state till 1230, when it was finally united to the dominions of Ferdinand III., king of Castile.

LEON, a city of Spain, cap. of former kingd. and prov. of same name, 59 m. S. Oviedo, and 176 m. NW. Madrid, on the railway from Madrid to Corunna. Pop. 9,603 in 1857. This ancient city, once the cap. of an independent kingdom and the residence of its sovereigns, stands on a kind of peninsula formed by the Bermesga and the Torio. It is surrounded by decayed walls, and bears in its narrow, unpaved streets, and almost ruinous houses, the indications of poverty and wretchedness. Among the public buildings the largest is the cathedral, a Gothic structure, with a lofty spire deservedly admired for its lightness and elegance: the ecclesiastical establishment comprises a bishop and 40 canons. There are 13 par. churches in the town and suburbs, and 2 canonical houses for Augustinian monks, with 7 other monasteries. There are also 4 hospitals, one of which is for foundlings. The inhab. are employed in linen weaving, in knitting stockings and caps, and making leather gloves; there are, also, some tanneries and soap-factories. The surrounding country is bold and beautiful, but agriculture is in the most degraded state. Hay-making, however, though common here, is not usual in other parts of Spain.

Leon was founded prior to the reign of the Roman emperor, Galba: it was called by the Romans *Legio septima Germanica*, from the circumstance of that legion being stationed here: it was the first large town recovered from the Moors, after whose expulsion, in 722, it was the residence of Christian kings, during more than three centuries.

LEON, a town of Mexico, prov. Guanaxuato, in a fertile plain, and on the road from Guanaxuato to Lagos, 36 m. WNW. the former city. Pop. estimated at 6,500. It has 3 convents, a college, and a hospital, and carries on some trade in corn.

LEON (ISLA DE), a long and narrow island close to the S. coast of Spain, prov. Cadiz, and separated from the mainland only by the narrow but deep channel of Santri Petri, crossed by the bridge of Zuarzo, which being the only point of approach to the city of Cadiz, is defended by strong redoubts. It is about 8 m. long by about 2 m. in breadth, and consists almost entirely of a dreary sandy waste, abounding with salt-water marshes. Cadiz occupies a small peninsula at the extremity of a long sandy isthmus, separated from the rest of the island by a line of fortifications called the Cortadura. (See CADIZ.)

LEON DE NICARAGUA, a city of Central America, and the former cap. of the state of Nicaragua; in a savannah near a volcano, by whose eruptions it has occasionally suffered: about 90 m. NW. Grenada, and 5 m. from the NW. shore of the Lake of Leon. Pop. estimated at 38,000. It

Digitized by Google

is surrounded by old walls; and has several suburbs, a cathedral and 3 other churches, several convents, a hospital, and a college. It is a bishop's see, and was originally founded, in 1523, on the spot now called Old Leon, but was removed to its present site in 1532.

LEONARD (ST.), a town of France, dép. Haute Vienne, cap. cant., on a hill near the Vienne, here crossed by a handsome bridge, 12 m. E. Limoges. Pop. in 1836, ex. com., 3,504. It was fortified in the 15th century, and has manufactures of coarse woollens, paper, earthenware, &c.

LEONESSA, a town of Central Italy, in the Neapolitan dominions, prov. Abruzzo Ultra, 36 m. WSW. Teramo, and 14 m. NNE. Rieti. Pop. 6,196 in 1861. The town has several churches and convents, and some large annual fairs. It is situated in a wild rugged country, in an amphitheatre, surrounded by mountains which, in winter, intercept the sun's rays for half the day, and render the climate very severe.

LEONFORTE, a town of Sicily, intend. Catania, dist. Nicosia, cap. cant., in a hollow of M. Tavi, near the Giaretta, and 37 m. WNW. Catania. Pop. 11,522 in 1862. Leonforte is a fine town, in a healthy situation. It is surrounded with walls, and has a large square, from which two long and well-built streets diverge. Its trade in corn, wine, oil, and silk is considerable, and it has a large annual fair. A good deal of asphaltum is found in its vicinity.

LEPANTO (TOWN AND GULF OF), Lepanto (an. *Naupactus*), a sea-port town of W. Greece, on the N. shore of the Gulf of Lepanto, about 3½ m. ENE. from the castle of Roumelia at its entrance, and 1 m. W. from the mouth of the Morino. Pop. 2,600 in 1861. The town is built on the side of a hill surmounted by a castle of little strength, whence two walls come down to the sea, enclosing the town on either side. The harbour, within the town, is shallow, and fit only for small craft, and the place has very little trade. In antiquity Naupactus was a place of considerable importance. It was occupied by the Athenians during the Peloponnesian war; and, after many vicissitudes, was nearly destroyed by an earthquake during the reign of Justinian. Its present walls are built on the foundations of those by which it was surrounded in antiquity.

Lepanto has given its name to the extensive gulf on which it is situated, anciently the *Corinthiacus Sinus*, or Bay of Corinth. The entrance to the gulf, between the ruined castles of the Morea and Roumelia, at the bottom of the Gulf of Patras, is only about 1 m. across. Within, it expands into a magnificent basin, stretching E. with a little inclination to the S. to Mazi, a distance of about 78 m., being, where widest, about 20 m. across. Corinth, whence it formerly derived its name, is situated near its S. extremity. It has many fine bays and harbours; and, in antiquity, there were several considerable towns on its banks. Between the castles, at its entrance, there are from 30 to 35 fathoms water; and within the gulf the water is generally very deep, there being no soundings in the centre at 300 fathoms.

Lepanto has, also, given its name to one of the greatest conflicts of modern times. Philip II., king of Spain, the Pope, and the Venetians, entered, in 1570, into a league against the Turkish sultan Selim, who, having conquered Cyprus, and become very powerful at sea, threatened to invade Italy. The Turks, being apprised of the intentions of the confederates, assembled a powerful fleet in the Gulf of Lepanto, having a large land force on board. The allies, commanded by Don John of Austria, having made equally great preparations, the two armaments encountered each other on the 7th of October, near the mouth of the Gulf of Lepanto. The contest was long, bloody, and destructive; and was maintained, on both sides, with invincible courage and resolution. In the end, however, the allies gained a complete victory. The Turks lost above 25,000 men, killed, and 10,000 taken prisoners, and with the exception of 30 or 40 galleys, that effected their escape, their whole fleet was either taken or destroyed. The Christians lost about 10,000 men, killed in the engagement, or who died of their wounds. Estimating it by the number of men engaged, this was certainly the greatest sea-fight that has taken place in modern times. It was, also, the first signal victory achieved over the Turks, and diffused the greatest joy throughout Christendom.

LERIDA (an. *Ilerda*), a fortified town of Spain, Catalonia, 85 m. W. Barcelona, and 72 m. E. by S. Saragossa, on the railway from Saragossa to Barcelona. Pop. 19,560, in 1857. The town is situated on the Segre (crossed here by a handsome bridge), under the protection of a hill, on which are seen the ruins of a castle now going to decay, but formerly of considerable strength. Owing to the excess of stagnant water in the vicinity, Lerida is unhealthy, and fevers prevail in spring and summer. A good quay, however, has been constructed, which not only keeps out the river, but forms a fine promenade. Its principal street is nearly 1 m. long; but the rest of the town is confined, and the houses are generally ill built. A cathedral, three parish churches, a military hospital, and a priests' college (formerly celebrated as a university, but suppressed by Philip V.), are the chief public buildings; but none requires notice except the cathedral. A double flight of steps leads to the terrace on which the church gates open; the principal front is embellished with six fluted Corinthian pilasters, between which are three doors with finely-wrought iron gates, and the building is surmounted by two handsome square towers. The surrounding country, being thoroughly irrigated, is extremely productive, particularly in wine, for which its gravelly silicious soil is well suited. Silkworms, also, are reared in considerable quantities. It has some silk and other fabrics, but they are not very important.

Lerida derives its chief celebrity from its connection with Roman history. In the plain below *Ilerda*, Scipio (anno 216 A.C.) gained a signal victory over the Carthaginian Hanno; and about 150 years afterwards it was rendered famous by the difficulties under which Julius Cæsar was placed when encamped in its neighbourhood. He had taken possession of a plain shut in between the rivers *Cinga* and *Sicoris*, and defended by a deep intrenchment, whilst at the same time Petreius and Afranius, Pompey's generals, were encamped on a hill between him and Ilerda. In the intermediate space is a small plain, in the centre of which rises an eminence, which, if seized and fortified, would enable its occupier to cut off all communication with the city. For this, during five hours, the opposing armies maintained a doubtful conflict; but, in the end, fortune declared in favour of Afranius, and Cæsar retreated to his camp. At the same time, also, the disastrous intelligence was brought to him that, by the melting of the snow, his bridges had been broken down, the country laid under water, and all communication cut off with those districts by which his army was provisioned. Famine was the immediate consequence; and Cæsar himself says: '*Militum vires inopia frumenti diminuerat, atque incommoda in dies augebantur; et tam paucis diebus magna erat rerum*

Digitized by Google

facta commutatio, ac se fortuna inclinaverat, ut nostri magnâ inopiâ rerum conflictarentur; illi omnibus abundarent rebus, superioresque haberentur.' Cæsar however, without loss of time, set his men to work, and having made a sufficient number of light and portable canoes, sent a party up the river during the night, who, with these boats, effected a landing, and fortified a camp. '*Huc legionem postea transducit; atque ex utrâque parte pontem institutum perficit biduo. Ita comitatus, et qui frumenti causâ processerant, tuto ad se recipit.*' (Cæs. de Bell. Civ., i. c. 52, 54.) Lerida has sustained many sieges; it was taken by storm in 1707, during the war of the succession; and the French again besieged it in 1810.

LERWICK, an eminent fishing station and bor. of barony, on Mainland, the largest of the Shetland or Zetland Islands, of which it is the cap., on the W. margin of the Sound of Bressay, opposite Bressay Island. Pop. 3,061 in 1861. The town is built along the curvature of the bay, and consists of a number of white houses, of from two to three stories in height, with their gables in the Norwegian style, turned to the street, but disposed with the utmost irregularity, and an utter disregard of every convenience, except that of being as near as possible to the water. The town-hall, parish church, and three dissenting chapels are the only public buildings. The harbour, which is entirely land-locked by Bressay Island, is so ample that it might contain nearly the whole British navy. Bressay Sound is a rendezvous for Davis Straits and Greenland whale ships, which here take on board supplies of provisions, and complete their crews with seamen belonging to the islands, whom they part with on their return. This has always been one of the principal stations of the Dutch herring fishery; but the fishery is now chiefly in the hands, not merely of the inhab. of Lerwick, but of the islanders generally, who resort thither for the purpose. Cod and other species of white fish are caught in the bay and neighbouring sea, and are also extensively exported. There is a manufactory of straw-plaiting for gentlemen's hats and ladies' bonnets; a branch of business carried on both in the Orkneys and Zetland Islands. Woollen stockings, under clothing, and gloves, all wrought with the hand, and sometimes of extraordinary fineness, are exported from Lerwick. It has a custom house, the gross revenue of which, in 1863, was 124*l.*; in 1860, it was but 47*l.* The shopkeepers are in the habit of shutting their shops during breakfast and dinner. Provisions are abundant, and about a half cheaper than on the main land of Scotland.

Lerwick was built above 200 years ago, principally for the accommodation of the Dutch fishermen, 2,000 of whose busses were then said to have been often collected in Bressay Sound. It has, however, been more prosperous during the last 30 years than at any previous period. Fort Charlotte, for the protection of the town from attacks by sea, stands a little to the S. The inhab. are of Scandinavian descent.

LESINA, and LISSA, two islands of the Adriatic, belonging to the circle of Spalatro, in Dalmatia, the first 25 m. S., and the second 33 m. SW. Spalatro. United area, 260 sq. m. Pop. of Lesina 12,539, and of Lissa 5,210 in 1857. Both islands are in great part mountainous, but they have, notwithstanding, a considerable extent of lower and productive land. Lesina (an. *Pharos*, or *Pharia*) is said to be one of the most fertile islands in the Adriatic, with a great variety of valuable products. Corn is raised on the low grounds, but the quantity is insufficient to supply the consumption of the inhab.; among its other products are wine, oil, figs, almonds, saffron, oranges, aloes, and honey. It has considerable numbers of sheep, and these with wool and cheese, are among the articles of export. The products of Lissa (the an. *Issa*) are similar to the above, and in it, also, the supply of corn is insufficient for the consumption. The wine of Lissa, which was commended by Athenæus, is now sadly degenerated. The inhab. of these islands are chiefly employed in fishing, and great quantities of fish are taken round their shores. They both furnish good marble, and prepare rosemary oil, liqueurs, &c. The town of Lesina, near the W. extremity of the island of same name, had 2,820 inhabitants in 1857. It is the see of a bishop, whose diocese comprises the islands Lesina, Lissa, and Brazza. In Lissa, which in antiquity had several flourishing towns, is also San Giorgio, with one of the best harbours in Dalmatia.

LESLIE, a bor. of barony and manufacturing town of Scotland, co. Fife, on an eminence on the left bank of the Leven, 1½ m. N. of the public road between Kirkcaldy and Cupar-Fife, 7½ m. N. by W. the former, and 9½ SW. by S. the latter. Pop. 2,264 in 1861. The town consists chiefly of one street, and contains a par. church and several dissenting chapels. Leslie House, the seat of the noble family of Rothes, is in the immediate vicinity. Leslie has mills for flax-spinning, employing above 500 hands. Weaving of cotton, in connection with the Glasgow manufacturers, and of the coarser species of linen fabrics, prevails to a considerable extent. There are also three rather extensive bleach-fields. Leslie has existed as a town for upwards of 300 years. Dr. Pitcairn, the celebrated physician and Latin poet, was born at Pitcairn, the family seat, in the neighbourhood of the town. At Strathhenry, near this place, the seat of his maternal grandfather, Adam Smith, author of the 'Wealth of Nations,' when only three years of age, was carried away by a party of gipsies. The inhabs. of the place have long been noted for their rage for religious and political discussions. The first 'Political Union' formed in Scotland was at Leslie, in 1831.

LETTERKENNY, an inland town and river port of Ireland, co. Donegal, prov. Ulster, on the Swilly, 4 m. from the SW. extremity of the lough of the same name, and 18 m. WSW. Londonderry. Pop. 2,160 in 1861. The number of inhabitants was exactly the same in 1831. The town consists of a square and a single street, and has a parish church, a Rom. Cath. chapel, three Presbyterian meeting houses, a national school, a fever hospital, with a dispensary, court house, and bridewell. General sessions are held in April and Oct., petty sessions every Wednesday, and it is a constabulary station. Markets on Fridays; fairs on the first Friday in Jan., 12th May, 10th July, third Friday in August, and 8th Nov. Some trade is carried on in the export of corn and other raw produce, the river admitting vessels of 150 tons to come up from the lough to near the town.

LEUCTRA, an ancient village of Greece, in the Theban territories, now Leftra or Lefka, 9 or 10 m. WSW. Thebes. It is at present only a heap of ruins, but is famous in ancient history for the victory gained in its vicinity, on the 8th of July, *anno* 371 B.C., by the Thebans, under Epaminondas and Pelopidas, over the Spartans. The latter were superior in number and perhaps, also, in discipline and military skill, to their adversaries; but the ability of their generals enabled the Thebans to achieve, despite every disadvantage, the greatest triumph ever won by one Greek army over another. Cleombrotus, the Spartan king, was left dead on the field, with many of his principal officers, and the flower of his troops. Sparta lost with this

Digitized by Google

battle the ascendancy she had long enjoyed among the Grecian states. (Xenophon, Hellan., lib. vi. cap. 4; Diodorus Siculus, lib. xv.)

LEUTSCHAU (Hungar. *Lőcze*), a royal free town of Hungary, co. Zips, of which it is the cap., on a hill 120 m. NE. Pesth. Pop. 5,364 in 1857. The town is old and ill built, but has a large and handsome square, a Gothic church, with the largest organ in Hungary, a large old town-hall, a new council-house, and several other edifices, the oldest Lutheran gymnasium in Hungary, a Rom. Cath. gymnasium, a high school, a noble female seminary, and an asylum for soldiers' children. It produces linen fabrics and mead, of which last a good deal is sent into Poland.

LEVANT, a term applied to designate the coasts of Europe, Asia, and Africa, along the Mediterranean, from Cape Matapan round the Ægean Sea, Asia Minor, and Syria, to the western confines of Egypt. In the middle ages, the trade with these countries was almost exclusively in the hands of the Venetians, Genoese, and other Italians, who gave to them the general designation of *Levante*, or Eastern countries. But the term Levant, being no longer vernacular in the languages of the nations now principally engaged in the trade with the countries referred to, seems to be falling into disuse.

LEVEN, a bor. of barony, sea-port, and manufacturing town of Scotland, co. Fife, on a level at the mouth of the river of the same name, on the N. shore of the Frith of Forth, 19½ m. N. by E. Edinburgh: on the W. of the river is its suburb of Dubbieside, or Inverleven. Pop. 2,723 in 1861. Leven consists of two principal, and not very regular, streets, running parallel to each other E. and W., with a variety of bye-lanes and detached houses. The communication between Leven and its suburb was long maintained by a suspension-bridge over the river, but a stone bridge was built in 1840. The only public buildings are the par. church, a Free church, and chapels belonging to the Relief and the Associate Synod. There is, also, a small congregation of Independents. There are two libraries, a mechanics' institute, and a great variety of friendly societies.

Leven is chiefly remarkable for its manufactures. There are a number of mills for spinning flax, driven partly by water and partly by steam, employing about 600 hands. There are, besides, many hand-loom weavers of coarse linens. It has also foundries for cast-iron, brick and tile works, and other manufactures. The harbour is formed by a creek at the mouth of the river. At spring-tides it admits vessels of about 300 tons, but it dries at low water, and is, owing to sand-banks, difficult of access.

LEWES, a parl. bor., market town, and par. of England, co. Sussex, rape and hund. of its own name, on the Ouse (crossed here by a stone bridge), 7 m. NE. Brighton, 43 m. S. London by road, and 50 m. by London, Brighton, and South Coast railway. Pop. of parl. bor., which comprises, with the old bor., parts of four out-parishes, 9,716 in 1861, against 9,282 in 1841. The town is principally situated on a steep declivity W. of the Ouse, which here cuts through the chalk hills; but it partly, also, stands on the level ground on the E. side, sheltered by the South Downs, that rise abruptly almost close to the river banks. The streets are broad, well-built, paved, and lighted with gas; and the town generally has an appearance of wealth and respectability. The chief public building is the assize-hall, in High Street, erected in 1812, at an expense of 15,000*l.*, comprising two courts, a council chamber, and other apartments. The house of correction, built on the plan of Howard, in 1794, was greatly enlarged in 1817, and now contains about 70 capacious rooms for prisoners, with 15 cells for solitary confinement. The silent system, with hard labour, is rigidly enforced. There are eight churches; and the ecclesiastical livings comprise four rectories, two of which are in the patronage of the crown. There are, likewise, eight places of worship for Wesleyan and Calvinist Methodists, Baptists, Independents, and Unitarians, to which, as well as to the churches, are attached well-attended Sunday schools. The free grammar school, supposed to have been founded in 1512, and rebuilt in 1850, in the Elizabethan style, provides gratuitous instruction in classics to 12 boys, the sons of burgesses; and there is a university exhibition for the scholars, tenable for four years, of the annual value of 35*l.* There is also a diocesan school. National, Lancastrian, and infant schools furnish elementary instruction for the children of the poor; and there are several endowed charities and benevolent institutions for the relief of the aged, sick, and indigent. Lewes had formerly an extensive trade in wool; but this has greatly declined; and the present traffic of the place, independently of a very considerable retail trade with the resident gentry of the district, is chiefly in grain, malt, sheep, and cattle. It is estimated that upwards of 80,000 sheep are sold annually at the Sept. and Oct. fairs. The Ouse is navigable up to the town, and there is a considerable trade with London, through Newhaven, its port. (See NEWHAVEN.) Lewes is a bor. by prescription, and is governed by two headboroughs and two constables, elected by the burgesses; but these officers are subject to the jurisdiction of the co. magistrates. The Lent and summer assizes are held here, and the quarter sessions for the E. division of Sussex are held in Jan., April, June, and Oct. This bor. has sent 2 mems. to the H. of C. since the reign of Edward I., the franchise down to the passing of the Reform Act being vested in the scot and lot payers within the bor. The Boundary Act enlarged the limits of the bor. so as to include with the old bor. parts of the pars. of Southover, St. Anne's, St. Thomas-in-the-Cliffe, and South Malling. Registered electors, 643 in 1865. Lewes is the place of election for the mems. for the E. division of Sussex, and the head of a poor law union, comprising 7 pars. Markets on Tuesday; cattle fairs, May 8 and Whit-Tuesday; large sheep fairs, Sept. 21 and Oct. 2.

The fact of Lewes being a Roman station seems extremely doubtful; but it had acquired its present name (said to be derived from *leswes*, the Anglo-Saxon word for pastures) at least two centuries before the Norman Conquest. William the Conqueror fixed on Lewes as the site of one of those fortresses by which he kept in awe his Saxon subjects; and considerable remains of it still exist, on a commanding height, NW. of the town. One gateway is nearly entire; and the keep, which is in tolerable preservation, has recently been repaired. E. of the town also are the ruins of a very ancient and wealthy priory, the walls of which enclosed an area of about 33 acres: at the dissolution of the monasteries, its revenues amounted to 1,090*l.*

LEWISHAM, a populous village and par. of England, co. Kent, lathe Sutton-at-Hone, and half-hund. Blackheath, on the Ravensbourne, a trib. of the Thames, 4½ m. SE. London, on the South Eastern railway. Pop. of Lewisham village, 7,372, and of par. 22,808, in 1861. Area of par., which includes the hamlet of Sydenham, 5,220 acres. The village consists chiefly of a long street, lined with good houses, and extending about 2 m. along the Hastings road. The lanes leading in

Digitized by Google

different directions abound with handsome villas and detached residences, inhabited by opulent merchants and retired citizens, attracted thither by the beauty of the scenery and superior salubrity of the air. The parish church, which stands near the centre of the village, is a handsome structure, erected in 1832, on the site of an older but still modern building, accidentally destroyed by fire. There are also places of worship for Wesleyan Methodists, Independents, and other dissenters; in Sydenham, besides a district church and episcopal chapel, there are five dissenters' meeting-houses. A grammar-school, founded in 1647, and now under the trusteeship of the Leather-sellers' Company of London, is conducted by an upper and under master, and well attended. A charity school, three subscription day schools, and several Sunday schools, have been established for teaching poor children; and there are almshouses for six poor women, and minor charitable bequests. The trade of the village is almost confined to the supply of the families resident within the par.; but at Loampit Hill some marl and chalk pits furnish considerable quantities of lime, and there are some large brick and tile fields.

LEXINGTON, a town of Kentucky, U. States, co. Fayette, of which it is the cap., on Town-forte, a tributary of the Elkhorn river, 25 m. ESE. Frankfort, and 70 m. S. Cincinnati. Pop. 12,395 in 1860. The town stands in the heart of a fine district, with a great many comfortable-looking villas and farmhouses in the neighbourhood. The chief street is a mile and a quarter in length, and 80 feet wide. Lexington is one of the most ancient towns in the state, and for a long time was its political, as it still is its commercial, cap. Its chief public estab. is Transylvania university, the oldest institution of the kind in the W. states. It was incorporated in 1788, and has 13 professors, and usually about 300 students. In 1829 the principal edifice, with the library, was destroyed by fire; but another library of 4,400 vols. has been collected. There are several superior private schools. The state lunatic asylum, founded in 1824, the U. States branch bank, courthouse, market-house, a large masonic hall, and eight churches, are the other chief public edifices. Lexington has manufactures of cotton bagging, cordage, woollen cloths and yarn, carpets, and machinery. The town derived its name from a party of hunters, who first heard, while encamped on the spot where it stands, of the memorable engagement between the American and British troops at Lexington, in Massachusetts, in 1775. A railroad, 28 m. in length, connecting this town with Frankfort, is continued to Louisville, on the Ohio.

LEYDEN (Lat. *Lugdunum Batavorum*), a celebrated city of the Netherlands, on the Old Rhine, 21 m. SW. Amsterdam, and 10 m. NE. the Hague, on the railway from Amsterdam to the Hague. Pop. 37,191 in 1861. The city is surrounded by ramparts and a wet ditch, and is entered by ancient gateways. On the outer side of the *cingel*, or ditch, which everywhere encompasses the town except where it is cut by the Rhine, is planted a beautiful double avenue of trees, and on the inner side rise the low green mounds, which serve the purpose of walls. Like other Dutch towns, Leyden is traversed by canals, crossed by numerous bridges; though, as its trade is but trifling, the canals are of little use. The streets are usually long, broad, and well built; there are some striking public edifices, and the town has an antique venerable appearance. The *Breede Straat* (Broad Street) of Leyden is not unlike the High Street of Oxford, reckoned among the finest in Europe. The houses in the Breede Straat are generally picturesque; and, though the number of colleges of ancient architecture, with their turrets, towers, and spires, in the High Street of Oxford, exceed the number of public buildings in the Broad Street of Leyden, there is one, at least, that will bear comparison with the most picturesque college in High Street. This is the old Hôtel de Ville, built, as appears by an inscription in front, in the year 1574. It has a tall spire, somewhat remarkable in its architecture, and not inelegant. It is built of a dark blue stone, which has the appearance of black marble, and its prominent parts are tipped with gilding. The body of the building has nearly thirty windows on a line in front, three pediments, or gables, highly ornamented, a handsome balustrade, surmounted by a ridge of stone globes, and the whole front of this remarkable piece of architecture may be said to be

'With glist'ning spires, and pinnacles adorn'd.'

The ground-floor of the town-house is appropriated as a market for butchers' meat, but this is not seen from the street. Nothing can exceed the cleanliness of Leyden in all its streets, whether those with or those without canals. The former, with their quays, are particularly neat, and the bridges are mostly of stone: there are not fewer than 150 bridges. In the council and audience chambers, on the first-floor of the town-hall, are several valuable paintings, as the Last Judgment, by Lucas Van Leyden; a large picture, representing the state of the city and its inhab. during its siege by the Spaniards, including a portrait of the heroic burgomaster Vanderwerf. The church of St. Peter, founded in 1321, one of the finest Gothic edifices in Holland, contains the tombs of Boerhaave, the Meermans, Scaliger, and Camper. Near this church is a large open square, ornamented with trees, and having a canal in its centre; it was formerly covered with houses, accidentally destroyed by the blowing up of a boat laden with gunpowder in the canal, in 1807. About 150 persons lost their lives on this occasion. The church of St. Pancras has also a most imposing front, and the tomb of Vanderwerf. In the centre of the city is a ruined tower, called the burg., of uncertain but ancient date, erected on the only elevated spot of ground for many miles round.

Leyden is a very dull, inanimate town, without manufactures, trade, or bustle of any kind. But it is, notwithstanding, a pleasant residence for men of learning and research. Its university, which, for a lengthened period, was one of the most celebrated in Europe, was founded by the prince of Orange, in 1575, to reward the inhab. for their bravery, and as some compensation for the sufferings they sustained during the siege of the city by the Spaniards. It soon attained to the highest estimation, being deservedly esteemed one of the very best of the continental schools for the study of classics, law, medicine, and divinity. Among its professors are the illustrious names of Douza, Joseph Scaliger, Daniel Heinsius, Gomarus, Arminius, Boerhaave, Van Swieten, Lecuenhoeck, Sgravesande, Burman, and Ruhnken. Grotius and Descartes were of the number of its pupils, as were Evelyn, Fielding, and Goldsmith; and though no longer so celebrated as formerly, it is still extremely well conducted, has valuable libraries and scientific collections, and able and learned professors. There are about 700 students on the average. The college buildings are detached, and, in fact, are placed at considerable distances from each other, in different streets; they are all plain stone and brick, and sufficiently evince, by their appearance, that they have been intended for use and not for ornament. The prin-

Digitized by Google

cipal of these buildings, which is very old, and was formerly a religious house, stands on the W. side of the city; its hall, in which the *senatus academicus* meets, is adorned with a fine portrait of William prince of Orange, founder of the university, and upwards of 100 portraits of professors in historical succession. The senatus consists of 33 professors; and as Leyden University requires no test of religious faith, either from its professors or scholars, it comprises all sects and denominations, both Christian and Jewish. Most of the lectures are delivered in Latin, and the public announcement of the courses is in that language. The students, who wear no particular dress, reside in lodgings in the town; and the greater number subscribe to a club-house and reading-room, supplied with German and French publications. The students of Leyden bear a high character for diligence.

The museum of natural history, attached to the university, surpasses most others in Europe, being mainly indebted for its excellence to the public spirit of the Dutch naval officers and foreign *employés*, who take every opportunity of forwarding natural curiosities to their native country; but it also owes much to the acquisition of the valuable collection of birds by Temminck, and to the labours of travellers and collectors sent by the *senatus* to Africa, S. America, and other parts of the globe. The museum, which is open *gratis* to all classes, consists of an upper and under story, occupying four sides of a large court. The classification of the animal kingdom is according to the system of Cuvier; and such is the zeal manifested in perfecting the collections, that at one time, not very long ago, 2,500 guilders, or 208*l.* sterling, were paid by the university for one shell of a *nautilus*, to complete the series of such specimens. The museum of Egyptian antiquities is particularly rich in *papyri*, jewellery, and gold ornaments; and comprises monuments from the ruins of Carthage, and the largest collection of Etruscan bronzes N. of the Alps. Siebold's extensive and valuable Japanese museum is also in Leyden. The library of the university has nearly 100,000 printed volumes, and 14,000 MSS., more than 2,000 of which are Arabic. The botanic garden, which comprises several acres, and is extremely well laid out, has an extensive series of specimens, arranged according to the systems of Linnæus and Jussieu, with extensive conservatories for rearing and preserving tropical plants.

Leyden has a good observatory, seventeen churches (one of which is Rom. Cath.); two hospitals; a naval and military asylum; an arsenal; custom-house; chamber of commerce; societies of Dutch literature, science, and poetry; branches of the Society of Public Good, the National Economical Society, and the Dutch Society of the Fine Arts, and an academy of design. It is said that all the children belonging to the city are being instructed, and that there is not one person unable to read and write.

In the 17th century the manufacture of fine woollen cloth was extensively carried on at Leyden, and the city is said to have had, in 1659, about 3,000 houses and 100,000 inhab. Its cloth manufacture has been for a lengthened period comparatively unimportant; but it is still carried on to some extent, particularly the manufacture of coarse cloths, and of counterpanes and rugs. It also carries on some other branches of industry, and has a considerable traffic in wool, butter, and other articles of agricultural produce. It is connected by canals, as well as railway, with Amsterdam, Haarlem, Delft, and the Hague.

During the latter part of the 17th and the greater part of the 18th century, the most celebrated branch of industry carried on at Leyden was that of printing and publishing. Many of the best and most beautiful of the Dutch editions of the classics, in 12mo., 8vo., and 4to., including most of those by the Elzevirs, issued from the presses of this city, and conferred on it renown. A good deal of printing and publishing is still carried on, but the works now published bear no comparison with the old *chefs-d'œuvre*.

The siege of Leyden by the Spaniards in 1574 is one of the most memorable events in the history of the great struggle made by the United Provinces to emancipate themselves from the blind and brutal despotism of Spain. The inhabitants displayed the most invincible courage and resolution. Valdez, the Spanish general, despairing of being able to carry the town by storm, endeavoured to cut off all communication between it and the surrounding country, and to effect its reduction by famine. He completed his lines of circumvallation, and so far succeeded in his object, as to entail the most tremendous suffering on the inhabitants, without, however, shaking their determination to die rather than give up their city to the enemy. At length the country round the town having been laid under water, a squadron of flat-bottomed boats laden with provisions and stores made its way through the Spanish lines to the city. This was decisive of the fate of the siege, the Spaniards being obliged immediately to raise it, after having incurred a very heavy loss.

Leyden has given birth to some highly distinguished individuals. Rembrandt was born (in 1606) in its immediate vicinity; and it is the native place of Gerard Douw, Vandervelde, Mieris, Jan Steen, and other distinguished painters; and of Vossius, Heinsius, Muschenbrock, Van Swieten, John Bocholt, better known as John of Leyden, founder of the Anabaptists. The learned and laborious geographer Philip Cluvier, or *Cluverius*, a native of Dantzic, resided principally in Leyden, where his excellent works on the geography of ancient Germany, Sicily, and Italy, and his valuable *Introductio in Universam Geographiam* were published. He died here, in depressed circumstances, in 1623, at the early age of 43.

LEYTON (LOW), a village and par. of England, co. Essex, hund. Becontree, 6½ m. NE. London, on the Great Eastern railway. Pop. of par. 4,794 in 1861. Area of par. 2,820 acres. Low Leyton is situated on the low grounds near the E. bank of the river Lea; but further E., connected by a long straggling street, is Leytonstone, on an eminence, comprising several handsome villas, chiefly tenanted by London merchants and traders. The church, a brick building with a low tower, is remarkable only as having been the scene of the pastoral labours of Strype the antiquary, who held the vicarage 68 years, and was buried here in 1737. A Rom. Cath. chapel and chapels for Wesleyan Methodists and other dissenters are the other places of worship; and the parish has, besides Sunday schools, a boys' free school, a school of industry for girls, and several minor charities.

LIBAU (Lettish, *Lepëia*), a sea-port town of Russia, gov. Courland, on the Baltic, beside the lake Libau; 105 m. W. by S. Mittau. Pop. 10,126 in 1858. The town is walled, and entered by a gate from the N. Its streets are narrow, and mostly unpaved; and its market-place, though large, is irregular. The houses are of timber, and mostly one story high. It has Lutheran, R. Catholic, and Calvinistic churches, a hospital, and an orphan asylum. The port, though commodious, has only from 8 to 12 ft. water, and

Digitized by Google

cannot, therefore, be entered by large vessels. It has, however, a considerable trade; most part of the produce of Courland, as cattle, linseed, corn, hides, and tallow, being exported from it. Its imports are chiefly colonial products and manufactured goods.

LIBERIA, a republican state of W. Africa, founded, in 1822, by free negroes from the U. States of N. America, under the auspices of the American Colonisation Society. Its territory extends along the Guinea coast for about 225 m., with a breadth inland of 20 or 30 m., chiefly between lat. 4° and 7° N., and long. 9° and 12° W. Pop. estimated in 1862, at 500,000, of whom about 16,000 were immigrants from America, and the rest natives of Africa. The coast is generally low, but the country gradually rises towards the interior, and at about 20 or 30 m. from the sea, the hills are of considerable elevation. Several rivers fall into the Atlantic within the republic—as the St. John, St. Paul, and Mesurado; but they are navigable only by small vessels for short distances. The soil is fruitful, and the climate better, or rather less destructive, than in most other part of the coast. Rice, cotton, coffee, sugar, indigo, bananas, cassava, and yams are raised; and camwood, palm-oil, ivory, hides, wax, and pepper are among the exports. The state, founded, as already mentioned, in 1822, was, on August 24, 1847, proclaimed a free and independent state, as the Republic of Liberia. The state was first acknowledged by England, afterwards by France, Belgium, Prussia, Brazil, Denmark, and Portugal, and, in 1861, by the United States.

The constitution of the Republic of Liberia is on the model of that of the United States of America. The executive is vested in a president and a non-active vice-president, and the legislative power is exercised by a parliament of two houses, called the senate and the house of representatives. The president and vice-president are elected for two years; the house of representatives also for two years, and the senate for four years. There are 13 members of the lower house, and 8 of the upper house, each county sending 2 members to the senate. It is provided that, on the increase of the population, each 10,000 persons will be entitled to an additional representative. Both the president and the vice-president must be thirty-five years of age, and have real property to the value of 600 dollars, or 120*l*. In case of the absence or death of the president, his post is filled by the vice-president. The latter is also president of the senate, which, in addition to being one of the branches of the legislature, is a council for the president of the republic, he being required to submit treaties for ratification and appointments to public office for confirmation. For political and judicial purposes, the republic is divided into counties, which are further subdivided into townships. The counties are four in number, and called Montserrado, Grand Bassa, Sinoe, and Maryland. The townships are commonly about eight miles in extent. Each town is a corporation, its affairs being managed by officers chosen by the inhabitants. Courts of monthly and quarter sessions are held in each county. The civil business of the county is administered by four superintendents appointed by the president with the advice and consent of the senate. In the year 1862 the public revenue amounted to 30,190*l*., and the expenditure to 29,973*l*. The Liberians have built and manned 30 coast traders, and they have a number of large vessels engaged in commerce with Great Britain and the United States. The capital of the republic and chief port is Monrovia, founded in 1821, a year before the establishment of the republic. Monrovia had an estim. pop. of 10,000 in 1862, and several good schools, together with a public library.

LIBOURNE, a town and river-port of France, dép. Gironde, cap. arrond., on the Dordogne, at its junction with the Isle, 26 m. ENE. Bordeaux, on the railway from Paris to Bordeaux. Pop. 13,565 in 1861. The town is regularly and well built. Its streets are wide and clean, its houses elegant, and it is surrounded with good walls and agreeable promenades. Among the chief public edifices are extensive cavalry barracks, a theatre, a public library, with 3,000 vols., and a handsome stone bridge of 9 arches across the Dordogne. The port, at high water, has from 10 to 16 ft. water, admitting vessels of 300 tons burden. Libourne is the seat of a sub-prefecture, of tribunals of primary jurisdiction and commerce, and a sub-commissariat of marine. It has manufactures of woollen stuffs, articles of military equipment, glass and cordage, and docks for shipbuilding. It is an entrepôt for salt and agricultural produce destined for Bordeaux.

LICHFIELD, a city, parl. bor., and co. of itself, locally situated in co. Stafford, hund. Offlow, 15 m. N. Birmingham, 29 m. W. Leicester, 108 m. NW. London, by road, and 116½ m. by London and North Western railway. Pop. of city, 6,893, in 1861, area co. of city (which is co-extensive with the parl. bor.), 3,180 acres. The city, which stands in a fine valley, on a small affluent of the Trent, is irregularly built with narrow streets; but it is well paved and lighted, many of the houses are handsome, and its general appearance is respectable. The chief public buildings, besides the churches, are the guildhall, a neat stone edifice, on the top of which are carved the city arms; the market-house, occupying the site of an old market-cross; the bishop's palace, in the Close, and a small theatre. Lichfield is an episcopal see, and has a noble cathedral on the N. side of the town, close to a fine sheet of water. It is built chiefly in the decorated Gothic style peculiar to the 12th and 13th centuries, and comprises a nave, choir, and transepts, with a ladye chapel. It measures, from E. to W., 410 ft., and is 153 ft. wide, measured along the transepts. There are three towers, the central one of which, rising from the intersection, is surmounted by a light steeple and has a total height of 280 ft.: the towers at the W. end are each 180 ft. high. The body of the church is spacious and lofty, supported by pillars formed of clustered columns with neat foliated capitals: the roof is beautifully groined, the choir is elegantly furnished, and there are several fine monuments, one of which is to Dr. Johnson, the lexicographer, a native of this city, where he first saw the light on the 18th of September, 1709. The exterior parts of the building are highly ornamented with sculpture and tracery-work; the W. front displays a multitude of figures in *alto-relievo*, illustrative of passages in Bible history; and on the roof is a statue of Charles II., erected by Bishop Hacket, who exerted himself during many years to repair the damages inflicted on the cathedral by the parliamentary troops in the great civil war. The whole building was thoroughly repaired in 1787–90, at an expense of 6,000*l*. The chapter comprises a dean, 6 residentiary canons, 14 prebendaries, and 5 priest vicars. In the city are 1 par. church and 3 district churches, in the patronage of the dean and chapter; besides which, there are places of worship for Independents, Wesleyan Methodists, Rom. Catholics, and other bodies of dissenters. Among the educational establishments are several

Digitized by Google

Sunday schools, 3 national schools, an English charity school, and a free grammar-school, founded by Edward VI., and rebuilt, in 1850, in the Elizabethan style. The school has 21 free boys and several stipendiary pupils boarding with the masters: among the former pupils of this school are the illustrious names of Ashmole, Addison, Garrick, Johnson, and Woollaston. The charitable institutions comprise two almshouses, a hospital for clergymen's widows and orphans, a mendicity society, and a dispensary. Lichfield has no trade or manufactures of importance. Its trade is chiefly local, arising out of the wants of the town and neighbourhood, and there is little show of activity amongst those engaged in business. The Grand Junction Canal passes the city, and it is, also, extremely well supplied with railway accommodation. It was anciently governed by a guild, dissolved by Edward VI., who gave it a charter of incorporation, subsequently confirmed by Charles II. Under the Municipal Reform Act, the bor. is divided into 2 wards, and the municipal officers are, a recorder, mayor, and 5 other aldermen, and 18 councillors. Corp. rev., 944*l.* in 1862. Quarter and petty sessions are held in the guildhall, and it has a county-court, before which 508 plaints were entered in 1848. Since the 33d Edward I., Lichfield has, with some intermissions, sent 2 mems. to the H. of C. Previously to the Reform Act, the franchise was vested in the freeholders of the co. of the city of Lichfield, and in the freemen and burgage-holders of the city. The boundaries of the present parl. bor. include the co. of the city, and the place called 'the Close,' belonging to the cathedral. Registered electors 704 in 1865. Markets on Tuesday and Friday; fairs, Jan. 10, Shrove-Tuesday, and Ash-Wednesday, for cattle, sheep, bacon, and cheese; May 12, for sheep and cattle; and first Tuesday in November for cheese.

LICHTENSTEIN (PRINCIPALITY OF), an indep. state of S. Germany, and the least in extent and pop. throughout Europe; between lat. 47° 5′ and 47° 18′ N., and long. 9° 26′ and 9° 38′ E.; having S. the Swiss canton of the Grisons; W. the canton St. Gall, from which it is separated by the Rhine; and E. the Austrian duchy of Vorarlberg. Area, 64 sq. m. Pop. 7150 in 1861. The surface is mostly mountainous: a range of the Grison Alps traverses it, separating the Rhine from the Samina, a tributary of the Ill. Cattle breeding, agriculture, timber-cutting, and cotton-spinning, especially the first, are the chief occupations of the inhabs. Corn, wine, fruit, and flax are the principal articles of culture. The government is vested in the prince, and in an assembly of 15 members, elected by 'all citizens who can read and write.' Appeal from the court of original jurisdiction in Vadutz, lies to the court of chancery in Vienna, in which the prince has a seat; and thence to the court of appeal at Innspruck. Vadutz, or Lichtenstein, the cap., is a town of less than 1,000 inhabs. The princip. furnishes a contingent of 91 men to the army of the German confederation: it has one vote in the full council of that body, and together with other small states (see GERMANY), a vote in the committee, and the 16th place in the German diet. The Prince of Lichtenstein is one of the richest proprietors of Europe: his estates in other parts of Germany, but especially in Moravia, extend over nearly 2,200 sq. m.; and his annual revenue is estimated at 1,200,000 florins, or 120,000*l.*; to which, however, his independent sovereignty contributes nothing.

LIEGE (Dutch, *Luyk*; Germ., *Lüttich*), an important commercial and manufacturing city and river port of Belgium, cap. prov. of same name; on the Maese, 13½ m. S. by W. Maestricht, and 54 m. E. by S. Brussels, on the railway from Brussels to Cologne. Pop. 97,544 in 1860. The city is surrounded by a neighbourhood with a dense pop., employed in branches of industry similar to its own. Its pop. in the middle of the 15th century is said to have amounted to 120,000. It is situated on the declivity and at the foot of a hill, and is divided into an upper and lower town. The latter stands at the confluence of the Ourthe with the Maese, and is intersected by many branches of the last named river, which are enclosed by stone walls, and crossed by numerous bridges. The chief bridge, the *Ponte de l'Arche*, thrown across the main stream of the Maese, is 153 yards in length, 49 ft. in breadth, and has 6 arches, varying in diameter from 50 to 55 ft. A convenient quay for commercial purposes extends both above and below this bridge, for the whole length of the town along the Maese, which is navigable for small vessels as far as this city. Liege was formerly fortified, but its fortifications have been almost entirely destroyed. It is defended on the NW. by a large citadel, lately rebuilt, and on the ESE. by Fort Chartreuse; besides which there are only a few outworks. There are 10 suburbs. Liege is, generally speaking, ill built. In both the lower and upper town, the streets are narrow, and in the latter they have the additional disadvantage of being so steep as to be ascended in many places by flights of steps. Among the 11 squares are 2 tolerably spacious; in one of which stands the town-hall, and in the other the theatre. The town-hall, comprising the provincial court-house and prison, is a dark stone building, of great extent and magnificence, with two open courts, surrounded with a colonnade resembling that of the ducal palace at Venice. It was formerly the residence of the prince-bishops of Liege. The cathedral of St. Lambert stood in this square; but it was destroyed by the French revolutionary forces in 1794, and no traces of it exist. The church of St. Jacques, in the decorated Gothic, is the architectural glory of the city. It was completed in 1552. Its interior is astonishingly magnificent, and displays some of the finest specimens of tracery and fret-work that are any where to be met with. It has a noble organ, but its statues and paintings are inferior. St. Croix, and some of the other churches, of which there are 21 R. Catholic and 1 Protestant, are also fine structures. The theatre is a handsome modern building, surrounded by an arcade: from the square in which it stands a piece of water runs to encircle the town on its W. side, bordered by a promenade planted with trees. The buildings of the university stand beside the Maese, on the ruins of a church of the Jesuits. This institution, founded in 1816, has faculties of theology, law, and physic; 46 professors, and usually from 400 to 500 students. It possesses a cabinet of mineralogy, with upwards of 5,600 specimens, a cabinet of 3,000 fossils, found in the vicinity, and other scientific collections, and a library comprising many curious MSS.

Liege is the Birmingham of the continent. It owes this distinction to its situation in a district abounding with coal and iron, and which also affords zinc, lead, copper, sulphur, alum, marble, and slate. The coal-field of Liege is the most extensive in the prov. of the same name, being 5 leagues in length, with a breadth varying up to 2 leagues.

The manufacture of cannons and fire-arms is that for which Liege and its environs are most celebrated. The royal cannon-foundry in this city, instituted in 1802, produces at an average 9

Digitized by Google

pieces of ordnance weekly, partly brass and partly iron. There are numerous manufactories of fowling pieces, muskets, and pistols. The guns of Liege are cheaper than those of England, but not quite so well made. The export of small arms, which amounted to 5,989,000 francs in 1851, rose to 11,151,000 francs in 1857, and to 18,132,217 francs in 1861. (Report of Mr. Barron, British Secretary of Legation.) The manufacture of arms is principally carried on by the men in their own houses. All fire-arms manufactured at Liege, except those turned out for the army at the royal foundry, must be tested at the '*banc d'epreuves*.'

Steam-engines and machinery are largely produced in Liege and in the adjacent busy and populous village of Seraing, about 2 m. to the SW., on the opposite bank of the Meuse. The palace of the former prince-bishops at that place having been bought in 1817 by an Englishman, Mr. John Cockerill, he established in it the largest hardware manufacturing establishment in Belgium, or indeed on the Continent. It is devoted to the construction of steam-engines and other descriptions of machinery, and to forging and manufacturing iron and iron goods. One of the first coke-blast furnaces was established in 1823 at Seraing, by Mr. John Cockerill. The king of the Netherlands, William I., took so much interest in the undertaking as to assist actively in its establishment, and at the end of a few years, in 1825, he even became a joint proprietor by purchasing the share belonging to Mr. Cockerill's brother. The factory was long without a rival on the Continent, both for its gigantic size and perfect internal economy. Mr. Cockerill showed no less genius in his financial than in his mechanical combinations, and became one of the founders of the National Bank. Unfortunately his restless spirit impelled him to embark in a great number (no less than sixty) of other enterprises in distant countries, even in Surinam. The Belgian revolution was the first event that checked his career. The new government claimed to succeed to the rights of king William, until Mr. Cockerill, by a great financial effort, made himself sole master of Seraing, and brought it to its highest pitch of prosperity in 1838. The National Bank having suspended payment in that year, Cockerill was obliged to adopt the same course. He died in 1840, leaving an untarnished reputation as a liberal employer of labour, a daring but honourable speculator, and a father of Belgian manufacturing industry. The Seraing works are now carried on by a flourishing '*anonyme*' company, under the name of 'Société de John Cockerill,' and still enjoy an European celebrity and custom. They include within the same area a coal mine, six blast furnaces, an iron factory provided with every apparatus, a steel puddling-mill, and a machine factory. Most of the locomotive engines upon the Belgian railways, the engines for steam-vessels, &c., used in Belgium, have been made here, and many have also been sent to other parts.

Liege has also manufactories of files, nails, stoves, and hardware of all kinds; watches, jewellery, bronze, and other ornaments; woollen and cotton fabrics, hats, glue, tobacco, paper, and chemical products; with numerous dyeing houses, tanneries, and distilleries. It has an exchange, a chamber of commerce, a bank, with the privilege of coining money, a savings' bank, numerous hospitals, and benevolent institutions, superior and elementary schools, and various learned societies.

In the 7th century, a village named *Legia* occupied a part of the site of the present city. In 712, the ancient cathedral was founded, and Liege was erected into a bishopric. In the 10th century its bishops were raised to the rank of independent sovereign princes. In the succeeding ages continual wars and disturbances prevailed between the burghers, who were ardently attached to popular institutions and the prince-bishops. It was taken on the 30th of October, 1408, by Charles the Bold, duke of Burgundy, and barbarously delivered up to military execution. During the French ascendancy, it became the cap. of the dep. of Ourthe.

LIEGNITZ, a town of Prussia, prov. Silesia, cap. gov. and circ. of Liegnitz, on the Katzbach, at its confluence with the Schwarzwasser, 46 m. W. by N. Breslau, on the railway from Berlin to Breslau. Pop. 18,662 in 1861, excl. of a garrison of 1,308. Liegnitz was formerly a fortress of some strength, but now has only gates without walls; and its ramparts being planted with trees and laid out in gardens, serve for public walks. It is an old, but a handsome, well built town: it has several suburbs, 2 Lutheran and 3 R. Cath. churches; a fine chapel—the *Furstencapelle*—in which are buried the princes of the line of Piast, a dynasty which gave 24 kings to Poland and 123 dukes to Liegnitz, from 775 to 1675, when the family became extinct. The old castellated palace of those princes in the centre of the town, surrounded by a wet ditch, an ancient council-house, a gymnasium, an academy, established in 1810 for the sons of Silesian gentlemen, whether R. Catholics or Protestants, an orphan asylum, a workhouse, and a hospital, are the principal buildings. Outside the town is a good cemetery. Liegnitz is the seat of the superior judicial courts, boards of taxation, and weights and measures, for its gov., and the head-quarters of several battalions of fusileers, of a *landwehr* or militia battalion, and of a commandant of police. It manufactures woollen, cotton, and linen stuffs, stockings, lace, Prussian blue, and starch, and has breweries and bleaching grounds, and an active trade in its own produce, and in madder and other products raised in the adjacent country. The gardeners in the vicinity are said to be the most expert of any in Silesia. On the 16th of August, 1760, Frederick the Great totally defeated the Austrian general Laudun in the neighbourhood of this town; Frederick made his dispositions with so much skill as to render it impossible for Marshal Daun, who commanded another Austrian army, to come to Laudun's assistance.

LIERRE, a town of Belgium, prov. Antwerp, cap. canton, at the confluence of the Great and Little Nethe, 10 m. SE. Antwerp, on the railway from Antwerp to Turnhout. Pop. 13,875 in 1860. The town is well built, and has several churches, a convent, a hospital, manufactures of cotton and woollen stuffs, with cotton-printing establishments, distilleries, breweries, and a number of oil mills, rape seed being largely cultivated in its vicinity.

LIFFORD, an inland town of Ireland, prov. Ulster, co. Donegal, of which it is the cap. It is situated on the extreme E. verge of the co., on the Foyle, immediately below the confluence of the Finn and Morne rivers, 14 m. SSW. Londonderry, on the railway from Londonderry to Enniskillen. Pop. incl. Strabane, 4,146 in 1861. Lifford is connected by a fine bridge over the Foyle with the town of Strabane in Tyrone, of which it is now merely a dependency. Lifford consists of two small streets, and has a par. church, a Rom. Cath. chapel, a Presbyterian meeting-house, a barrack, and a courthouse and prison for the co. Donegal. It sent 2 mems. to the Irish

Digitized by Google

parliament till the Union, when it was disfranchised.

LIGOR, a town of SE. Asia, cap. of a Malay principality, dependent on Siam, on the Ta-yung, near its mouth in the Gulf of Siam, about lat. 8° 17′ N., long. 100° 12′ E. Pop., estimated at 5,000; chiefly Siamese, Malays, and Chinese. It appears to have been formerly more populous; but it was captured by the Burmese, and its inhabs. carried off, in 1760, and again in 1785. It has brick ramparts and a wet ditch, and some cannon were mounted on its walls. Within the town are many brick temples and pyramids, one having a gilt spire, a conspicuous object at sea; but all the dwelling-houses are of less solid materials. Two or three Chinese junks trade with Ligor, bringing cotton, and taking back tin, black pepper, rattans, and other articles of native produce. The rajah of Ligor has extensive authority, with the power of capital punishment, over all the Malay states, tributary to Siam.

LILLE (Flem. *Ryssel*), a strongly fortified city of France, dép. du Nord, of which it is the cap., on the canal connecting the Scarpe and Lys, in a spacious plain 9 m. from the Belgian frontier, and 124 m. NNE. Paris, on the Northern railway. Pop. 131,827 in 1861. The city is surrounded by a line of walls and bastions; beyond which, on its NW. side, is the citadel, a regular pentagon, with a double ditch and extensive outworks, containing excellent barracks, officers' quarters, and magazines. The city was formerly entered by 7 gates, the most southerly of which, the *Porte de Paris*, a handsome Doric arch, built in 1682, to commemorate the military exploits of Louis XIV., was pulled down in 1864, to extend the city towards the south. Few French towns are generally so well laid out as this, though some parts, principally inhabited by the manufacturing population, are of very poor aspect. There are nearly 300 streets, the principal of which are straight and wide; and 32 squares and market places, the largest, the *Grande Place*, being 170 yards in length by nearly 80 in breadth. The houses are mostly modern, and in a solid, plain style, built chiefly of brick, but in part of stone from the neighbouring quarries. Few have more than 2 or 3 stories. Of late years, many have been built with areas in front, and foot pavements are becoming pretty general in the principal thoroughfares.

Lille has many large and conspicuous public edifices. The new *Hotel de Ville*, built in 1846, has taken the place of the old town-hall, a heterogeneous assemblage of buildings of different epochs. The new *Hotel de Ville*, in the Renaissance style, and embellished with statues, is the seat of the tribunal of commerce, council of *prud'hommes*, *dépôt* for the *octrois*, police office, the residences of the chief civil and military authorities, society of sciences and arts, museum of natural history, cabinet of physical objects, and library of archives. The old *Hotel de Ville* was originally a palace, constructed by the dukes of Burgundy in the 13th century, and was inhabited in 1524 by the Emperor Charles V. In 1700 it was partially destroyed by fire; its ancient hall of conclave was ornamented with some fine wainscoting, and several good paintings by Arnold de Vuez. Here were preserved the portraits of all the counts and countesses of Flanders, of the house of Burgundy. The largest and handsomest of the ecclesiastical edifices is the church of Notre Dame de la Treille et St. Pierre, the first stone of which was laid in 1855. It replaces the ancient church of St. Pierre, erected in 1046 by Baldwin of Lille, and destroyed during the revolution. The church of St. Catherine, of simple and elegant architecture, is unfortunately hidden by mean buildings: it possesses the magnificent painting by Rubens, of the martyrdom of St. Catherine, which escaped destruction during the revolution, though the elaborately ornamented door of the choir was then carried off. The church of St. Maurice, built in the 12th century, is the largest and oldest in the city; but its tower, which had become unsafe, has been removed. Previously to the revolution it possessed numerous excellent paintings, and it has still a St. Nicholas by Vanderburgh, and a martyrdom of St. Maurice by L. Jan. St. Madeline, with a handsome cupola, is the only other church worthy of remark. There are 5 hospitals. The *Hôpital Général*, founded in 1733, is a fine pile of building, of great extent, and usually accommodating 1,500 patients. The *Hôpital Comtesse*, founded in the 13th century by the daughter of Baldwin, count of Flanders, and emperor of Constantinople, though it suffered greatly from fire in 1467, preserves all the characteristics of its original style of architecture. Its chapel has some good paintings by Vuez. The military hospital is large, well aired, and altogether one of the best in France. In 1844 a school of military surgery was established in it. Several large barracks are situated in different parts of the city. Lille has had a mint since a very early period, and of late steam has been used in its machinery. The Protestant church, synagogue, *abattoir* or public slaughter-house, exchange, the prisons, the theatre, constructed in 1785, concert-hall, and prefecture, the last three being handsome buildings, are the remaining principal public edifices.

Lille has numerous benevolent institutions, a communal college, a public library with 21,000 volumes, well arranged, and comprising some valuable MSS., and a gallery of paintings comprising some admirable works of Vandyke, Rubens, Vuez, and other masters of the Flemish, French, and other schools. In 1834, this gallery was enriched by a collection of designs from the Italian school. A royal academy of music, academies of drawing, and architecture, a botanic garden, and various learned societies, nearly complete the list of public establishments. The canal on which Lille is built has several branches navigable for small trading vessels, which pervade the city. In its progress by and through Lille, different parts of this canal are called the upper, middle, and lower Doule; along the middle Doule, or portion between the town and the citadel, is a fine *esplanade*, the favourite resort of the upper classes. The middle Doule is here crossed by a handsome bridge, the *Pont Napoléon*; the other bridges are in no wise remarkable. Lille has several suburbs, some beyond the walls, and others, within the last few years, included in the fortifications. They are chiefly inhabited by the manufacturing pop. By a decree of October 13, 1858, the four southern suburbs, called Vazemmes, Moulins-Lille, Fives, and Esquermes, were united to the city. It was in consequence of this decree, which enlarged Lille to a considerable extent, in the interest of its manufacturing activity, that the fine old *Porte de Paris*, before mentioned, had to be pulled down. The process of demolition caused five out of the seven old gates of the city to disappear, the only two left standing being the *Porte de Gard* and the *Porte de Roubaix*, the latter, built in the Renaissance style, of coloured bricks, dating from 1662.

Lille is one of the chief seats of the French cotton manufacture. Calicoes, cotton, handkerchiefs, *indiennes*, stockings, and cotton yarn are

Digitized by Google

the goods principally produced. The manufacture of table linen, linen thread, and lace is also considerable; and fine woollen cloths, velvets, serges, hats, leather, paper, beet-root sugar, Geneva, soap, and mineral acids are made, some to a greater, and some to a less extent. The government has here a tobacco manufactory and a saltpetre refinery, and the neighbourhood is studded with bleaching grounds and oil mills; and it is in the centre of some very extensive beet-root plantations. Steam power is extensively employed in the different manufactures.

Lille is the seat of courts of primary jurisdiction and commerce, a *conseil des prud'hommes*, and forest inspection, and is the head-quarters of the 16th military division of France.

The city is supposed to have been founded in 640. It successively belonged to the counts of Flanders, the kings of France, and the dukes of Burgundy. In 1667 it was taken by Louis XIV.; and, being improved and fortified by Vauban, was definitively annexed to the crown of France. It has sustained several sieges, of which the most celebrated was that by the allies, under the Duke of Marlborough and Prince Eugene, in 1708. It was bravely defended by Marshal Boufflers; but notwithstanding the gallantry of the garrison, and the fact that the French had a powerful army in the field, it was ultimately obliged to surrender. In 1792 it was bombarded by the Austrians.

LIMA, the cap. city of Peru, and, next to Mexico, the most magnificent in the countries formerly comprised in Spanish America, on the Rimac, in a delightful valley, from 500 to 600 ft. above the level of the ocean, 6 m. from its port of Callao, on the Pacific, and about 300 m. SSE. Truxillo. Pop. estimat. at 75,000 in 1863. The great chain of the Andes passes within 20 leagues of the city, but its spurs approach to within three-fourths of a league from its gates, and form an amphitheatre, within which Lima is built. The Rimac, which separates the city from its suburb, San Lazaro, is crossed by an excellent stone bridge of six arches, which, being furnished with recesses and seats, is a favourite promenade. The city, about 2 m. in length E. to W., by 1¼ m. in its greatest breadth, is of a triangular, or rather semicircular, shape, the base, or long diameter, being formed by the river. Elsewhere, Lima is surrounded by a parapet wall, about 7 m. in circuit, from 18 to 25 ft. high, and about 9 ft. thick; it is pierced by six gates, and is defended by 35 bastions. Except at some of the bastions, the wall is too narrow for the mounting of artillery; and it is merely sufficient to protect the town against any sudden attack by an Indian force, for which purpose it was constructed, in 1685. At the SE. extremity of the city is a small citadel, in which are the artillery barracks and a military dépôt. When seen from Callao roads, or even from a less distance, Lima has an imposing appearance, its numerous domes and spires giving it an Oriental aspect. Like the other Spanish cities of America, it is laid out in *quadras*, or squares of houses, 400 ft. each way, and divided by streets 33½ ft. wide, intersecting each other at right angles. The courses of the streets do not follow the cardinal points, but vary from E. to SE. in order that the walls may cast a shade both in the morning and afternoon. Through the centre of nearly all the streets directed E. to W. runs a stream of water, 3 ft. wide, used as a receptacle for all the filth thrown out from private dwellings. Most of the refuse is, however, got rid of by the Turkey buzzards, which swarm in Lima, and are the most efficient, or rather the only, scavengers. The streets are paved with round pebbles, and the narrow foot-paths with flat stones, in very bad repair. The same plan extends to the suburb of San Lazaro. The city is divided into 4 quarters, and each of these into 35 *barrios*. For each barrio an *alcalde*, or district magistrate, is selected from among the inhab. For religious purposes, it is divided into 8 parishes. On account of the frequency of earthquakes, few houses are more than one story high; or, if there be two stories, the walls of the upper consist of only cane, or wattled reeds, plastered over with clay, and whitewashed or painted. This kind of architecture is applied to even the churches and other public edifices, their upper parts being of wood-work, covered with stucco. The lower parts of the houses are mostly constructed of *adobes*, or sun-dried bricks, made of clay and chopped straw. The roofs are uniformly flat. Some of the better sort of houses have a terrace on the top, formed of large thin baked bricks; the common dwellings are usually roofed only with thin rafters, cane, and mats, covered with a layer of earth an inch or more thick; but as it rarely or never rains with any violence in Lima, these light roofs sufficiently answer their purpose, at the same time that they are not so easily thrown down by an earthquake, and when thrown down are incomparably less dangerous than if they were constructed of more solid materials. Most of the houses have a *patio*, or court yard in front, with a large arched gateway opening to the street, over which is a heavy balcony. The walls of the *patios* are painted without and within with various devices, in fresco. Till of late years, few of the windows had either glass or sashes. Almost every house has a stream of water running through its precincts, which is used for domestic purposes. Gardens are rare.

In the centre of the city is the *Plaça Mayor*, or *de la Independencia*, the principal square and market-place. It is a fine open space, the size of a squadra. On its E. side are the cathedral, the *sagrario* or principal parish church, and the archbishop's palace; the last, a large superior edifice, is partly occupied by the Peruvian senate. On the N. is what was once the viceroy's residence, an old unsightly structure, now appropriated to the courts of justice and other government offices. On the W. side are the *cabildo* or town-hall, a Chinese looking edifice, the city gaol, and other offices; and on the fourth side is a colonnade before a row of private houses. The above public buildings have all ranges of mean-looking shops in their lower story. The booths of small traders cover nearly a third part of the area of the square. In the centre is a fine bronze public fountain, 40 feet high, raised upon a level table of masonry 40 feet on each side, ornamented with eight lions supporting a statue of Fame, and supplied with excellent water from the Rimac.

A considerable portion of the area of the city is occupied by convents and churches. Besides a great many convents and nunneries, with churches attached, Lima has 57 churches, and 25 chapels belonging to hospitals and colleges. The cathedral founded by Pizarro, and in which he is buried, is a large fine edifice, 186 ft. in front by 320 deep; but its effect is injured by gaudy colouring and grotesque ornaments. At either corner of the front is an octagonal tower, rising nearly 200 ft. from its base, which is 40 ft. high. These towers, having been thrown down by the earthquake of 1746, were rebuilt in 1800. In the belfries are several fine-toned bells, the largest of which weighs 310 quintals. The interior of the cathedral is magnificent. It is divided into three naves, and paved with large earthen tiles. The roof, which is beautifully panelled and carved, is supported by

Digitized by Google

arches springing from a double row of square stone pillars. The high altar is in the Corinthian order, and its columns, cornices, and mouldings, are either cased with pure silver or are richly gilt. The seats and pulpit in the choir are exquisitely carved, and there are two large and fine-toned organs. 'The riches which have been lavished at various times upon the interior of this edifice, are scarcely to be credited anywhere but in a city which once paved a street with ingots of silver to do honour to a new viceroy. The balustrades surrounding the great altar, and the pipes of the organ, were of silver. It may be mentioned, as a proof of the abundance of silver ornaments, that in 1821, 1½ ton of silver was taken from the various churches in Lima without being missed, to meet the exigencies of the state' (Caldcleugh's Travels in S. America, ii. 56.) The *sagrario* has a fine façade, and its interior is very splendid and richly adorned. The roof is lofty and beautifully panelled, and in the centre is a cupola resting on the four corners formed by the intersection of the cross aisle. Several of the other par. churches are worthy a visit. Some of the conventual churches are remarkably rich. That of the Dominicans, 300 ft. long by 80 broad, has a steeple 180 ft. high, being the loftiest in Lima.

The revolution secularised a good deal of church property; but, previously to that event, the Dominican convent is said to have had a rental of 80,000 dollars a year and a large library, some good paintings, and numerous reliques, including a statue of the Madonna studded with gems, said to be of immense value. Some of the cells belonging to it were richly furnished. The Franciscan convent is among the oldest and largest in Lima. Its buildings cover two quadras, and its church, which is next in size to the cathedral, is gorgeously adorned. Its monks derive a considerable revenue from the manufacture of shrouds. In addition to the convents, there are *casas de exercicio*, into which females retire during Lent, to perform acts of penance; and in the convent of Recoleto are similar cells for men. The number of monks and nuns here and in other parts of Peru was formerly very great, but it is now otherwise. There are two foundling asylums and eleven public hospitals, one of the latter, St. Andres, having 600 beds. Attached to it is an indifferent botanic garden, and adjoining it is the medical college of San Fernando, established in 1809. Lima has a university, founded in 1571; it occupies a handsome building, and is partly supported by congress and partly by private contributions. The students generally reside within the walls of the institution. The Peruvian house of representatives holds its sittings in an apartment in the university. The former palace of the Inquisition is now appropriated to a gaol, and to the national museum, which possesses valuable collections of minerals and Peruvian antiquities. Lima has several ecclesiastical colleges and seminaries, and a nautical academy. The colleges, however, are not in a flourishing state; but, on the other hand, numerous Lancastrian and other primary schools have sprung up, and all the white children are taught to read and write. It is reported that education has made a great advance in the Peruvian capital since the revolution, and its emancipation from the control of the priests is, at all events, an immense step in advance. A considerable number of modern scientific and other works are annually imported from Europe.

There is a good theatre, but of rather a singular form, it being a long oval, with the stage occupying the greater part of one of its sides. Bull-fights were formerly celebrated at Lima with an *éclat* that rivalled those of Seville; and, though abolished by San Martin in 1822, they appear to have revived. The amphitheatre, *Plaça del Acho*, in the suburb of San Lazaro, where they are held, has an area 400 ft. in diameter, surrounded by a barrier 7 ft. high, and three tiers of boxes raised on brick pillars, with accommodations for from 10,000 to 12,000 spectators. Cock-fighting is a favourite public diversion; the cock-pit, or *coliseum*, is an area 50 ft. in diameter, surrounded by nine benches and a tier of boxes, which, on Sundays and holydays, are usually crowded by visitors. Outside the walls is the pantheon, a general cemetery established early in the present century. It is a square inclosure, laid out in walks and gardens, the surrounding wall being full of niches for the reception of corpses. These are generally deposited without coffins, their decay being accelerated by the application of unslacked lime. Before the establishment of the pantheon, the dead were always buried in churches; but this is now prohibited, and hearses belonging to the pantheon are provided for the performance of funerals, which are not allowed to traverse the streets after noon. Immediately without the suburb San Lazaro are some excellent public baths. The road from Callao to Lima is quite straight, and for nearly the last 2 m. is fenced on either side by a brick wall and parapet, shaded with trees, and irrigated by running streams. At intervals of 100 yards are ornamental stone seats; but the whole work, together with the fine gateway at its upper end, by which the city is entered, has been suffered to fall into decay.

The vicinity of Lima, where not covered with villas and pleasure-grounds, is very productive of maize, barley, various other grains, beans, kitchen vegetables, fruits, sugar, rice, tobacco, yams, and potatoes; grapes are abundant, and yield some pretty good wine; olives thrive well; and water-melons are important articles of culture, being largely consumed in the city during the hot months. But agriculture and horticulture is much neglected. As very little rain falls at Lima, artificial irrigation is indispensable. The Incas had cut numerous trenches and canals in the neighbourhood, which the Spaniards finding ready to their hands, took some care to keep in order; but at present the drains for conveying the water from the city are so bad, that the water is either suffered to run to waste, or to stagnate and generate noxious effluvia. Live stock are fed in great numbers near Lima, large quantities of animal food being consumed in the city. The demand for poultry is immense, especially for geese and turkeys. Cook-stands for fish (which are good and cheap) and fried pork are to be found at the corner of every square. Pastry and sweatmeat criers are seen everywhere in the streets; and *masamorias* or pap-shops are very common. Pap boiled with or without fruit or vegetable acid, and sweetened with sugar or molasses, constitutes the Limenian dish '*masamora*,' which is as great a favourite in Lima as roast beef in London. Few of the dishes, however, suit the taste of strangers, from their being, with the exception of poultry, either steeped in lard, or highly seasoned with pepper. Most families in inferior circumstances provide themselves with ready cooked food from the streets. Water for drinking, which is almost wholly supplied from the large fountain in the *Plaça Mayor*, is carried round the city by asses and other beasts of burden, carriages of most kinds being rare.

The climate of Lima has been much praised: the extremes of heat and cold are never experienced; within the city the thermometer, in the

Digitized by Google

shade, never falls in winter under 60° F., nor rises in summer above 82°, its usual station being about 80° in well-aired apartments. The ordinary daily range of temp. is only 3° or 4°. The year is divided between the dry and the moist season; the former begins in Nov., the latter in May; and throughout the winter (May to Oct.) a drizzly mist often prevails in the morning and evening. Cool breezes from the SW. blow for three-fourths of the year, and the hot rays of the sun are generally intercepted by a layer of clouds. Earthquakes occur every year, particularly after the mists disperse, and have usually been very destructive at intervals of 50 or 60 years; but Lima is free from storms. Epidemics are few. The climate however, or rather, perhaps, the neglect of sanatory regulations and of cleanliness, seems to have an enervating tendency, as shown in the degeneracy of most of the inhab., especially the whites. The population is made up of whites and creoles, *mestizos*, Indians, and about 20,000 negroes. The negroes are chiefly employed as domestics and mechanics; the mestizos in trade and agriculture. The physical and moral character of the white inhab. of Lima is Andalusian. The ladies are celebrated for beauty and fineness of figure, but want freshness of complexion. They wear a very remarkable walking dress, peculiar to this city and Truxillo. 'This dress consists of two parts, one called the *saya*, the other the *manto*. The first is a petticoat made to fit so tightly, that, being at the same time quite elastic, the form of the limbs is rendered distinctly visible. The manto, or cloak, is also a petticoat, but instead of hanging about the heels, as all honest petticoats ought to do, it is drawn over the head, breast, and face; and is kept so close by the hands, which it also conceals, that no part of the body, except one eye, and sometimes only a small portion of one eye, is perceptible. A rich coloured handkerchief, or a silk band and tassel, are frequently tied round the waist, and hang nearly to the ground in front. (Hall's Travels, i. 108, 109.) Within doors the ladies adopt the English or French costume, with a profusion of jewellery. The morals of both sexes have been represented as lax in a high degree, but they are probably not worse (which, however, is not saying much) than in most other large cities of South America. Extravagance in living, dress, and gambling are carried to a great extent; and smoking is universal among both men and women.

Lima was made an archbishop's see in the 16th century, and was long the grand *entrepôt* for the trade of all the W. coast of S. America; but a considerable part of the foreign trade of Peru is now carried on through Buenos Ayres, and the former is also in the habit of importing European goods at second-hand from Valparaiso, and other parts in Chili. It is still, however, the great emporium of Peru. Its exports consist principally of bullion and specie, vicunna, and sheeps' wool, bark, chinchilla skins, saltpetre, copper, tin, and sugar. The imports are principally woollen and cotton stuffs, cutlery, and hardware from England; silks, brandy, and wines from Spain and France; stock fish from the U. States; snuff, indigo, tar, and naphtha, from Mexico; tobacco from Colombia, with timber for the construction of ships and houses from Guayaquil; wheat, flour, dried fruits, and bullion from Chili; Paraguay tea from Paraguay, spices, quicksilver, and perfumery. (For details, see PERU.)

About 3 leagues to the SE. is the favourite watering-place Chorrillos, resorted to by people of rank and fashion for several months in the summer, and by invalids during the winter. It is only a small fishing village, constructed of cane and mud. The Indian owners of the houses let them to the bathers at a high rate during the bathing season; and some persons either take them for a term of years, or construct other light summer houses for themselves. Chorrillos is sheltered from the SW. blast by an elevated promontory, called the Moro-Solar. Numerous Peruvian antiquities lie scattered over the rich but now partly waste and desolate plain between this town and Lima.

Lima was founded by Pizarro in 1535, under the title of *Ciudad de los Reges*, 'City of Kings.' It suffered severely from the earthquakes of 1678 and 1746, the latter leaving only 20 houses standing out of 3,000; and again by those of 1764, 1822, and 1828. San Martin entered it on the 12th July, 1821, and proclaimed the independence of Peru at Lima on the 28th of the same month.

LIMERICK, an inland co. of Ireland, prov. Munster, having N. the estuary of the Shannon, by which it is separated from Clare, E. Tipperary, S. Cork, and W. Kerry. Area 660,898 statute acres, of which about 90,000 are unimproved mountain and bog. Except on the S., W., and NE. extremities, the surface is generally flat. Climate mild, but very humid. Soil for the most part excellent, and applicable to every purpose of husbandry. Tillage has of late years been much extended in this co., but is, speaking generally, very backward: still, however, there is a good deal of grass land, and grazing husbandry and the dairy are both extensively pursued. Some fine long-horned cattle are bred and fattened in this co., particularly in the low grounds along the Shannon. The pernicious system of *con acre* (see IRELAND) has been widely spread in Limerick; and, though there has been a great increase in the exportation of wheat, wheat-flour, oats, butter, and most other articles from the co., and a material improvement in stock, and in the implements of husbandry, it is believed that the condition of the cottiers, and the smaller class of occupiers, has been but little, if at all, improved. The latter, in fact, are in the most abject state; and it would seem that in Ireland the peasantry are frequently most wretched where the land is finest. Property in very large estates; tillage farms, mostly very small, but some of the grazing farms are extensive. Minerals and manufactures, excepting some departments of the latter carried on in the city of Limerick, of no importance. Principal rivers, exclusive of the Shannon, Maig, Deale, and Mulkerna. Limerick is divided into 9 baronies and 125 parishes, and sends 4 mems. to the H. of C., viz. 2 for the co. and 2 for the city of Limerick. Registered electors for the co. 6,318 in 1865. At the census of 1861 Limerick co. had 27,948 inhab. houses, 31,280 families, and 172,801 inhabitants, while, in 1841, the co. had 48,127 inhab. houses, 56,358 families, and 330,029 inhab.

LIMERICK, a city, parl. bor., river port, and co. of a city in Ireland, prov. Munster, on the Shannon, and on the Great Southern and Western railway, 107 m. SW. Dublin, and 55 m. E. Loop-head at the mouth of the Shannon. Pop. of city 44,626 in 1861, against 48,391 in 1841. The city is principally situated on the SE. side of the river, within the co. of Limerick, but partly also on its N. side, within the co. Clare. The co. of the city, which is identical with the parl. bor., includes an area of 33,863 imp. acres. Limerick is the fourth city of Ireland in respect of size and importance. It owes this distinction to its situation at the head of the estuary of the Shannon, which has made it the emporium of the extensive and fertile districts watered by that great river.

Digitized by Google

It is divided into—1. The English town, now the oldest and most decayed portion, on King's Island, formed by a detached arm of the Shannon; 2. Irish-town, immediately S. of the above; and 3. the New Town, to the W. of the latter, called Newtown-Pery, from Pery the family name of the earl of Limerick, on whose estate it is built. Popularly the first two divisions are called the Old, and the latter the New Town. The country part of the city of the co., including Thomond Bridge on the W. side of the river, and many other extensive lines of cottages, is called the Liberties. The contrast between the different parts of the city is very striking. The Old Town is said, in the Municipal Boundary Report, to be 'one vast mass of filth, dilapidation, and misery, which nothing but the general employment of the people throughout the country can correct, because the unemployed poor are attached to the large crumbling city, where they can find, at a cheap rate, something like a roof to cover them.' The New Town, on the other hand, which has been wholly constructed within the last half century, is well-built, and the streets, which are broad and straight, cross each other at right angles. It has a handsome square, in which is a column surmounted by a statue of Lord Monteagle. The houses in the liberties are mostly mere cabins, occupied by a very poor agricultural population. The main arm of the Shannon is crossed by two bridges, one of which, Thomond Bridge, originally constructed in the early part of the 13th century, has been rebuilt; the other, or Wellesley Bridge, of 5 arches, each 70 ft. in span, a handsome structure, was completed in 1827. There are three bridges over the smaller arm of the Shannon, between English-town and Irish-town.

The co. of the city has thirteen parishes and eight parts of parishes, besides an extra-parochial district; six of the parishes being within the city properly so called, which is also the seat of the see of Limerick. The cathedral, a large Gothic pile, has a lofty tower, a handsome interior, and many monuments, among which is that of Donogh O'Brien, king of Thomond. The embattled tower of this cathedral, 120 ft. in height, commands a fine view of the city and adjacent country, including the course of the Shannon. None of the parochial churches are worth notice, except St. Minichin's church, formerly the most ancient in the kingdom, but rebuilt, which, though small, is for situation and architecture by far the handsomest sacred edifice in the city. According to the Rom. Cath. divisions, the city consists of five parishes, that of St. John being the bishop's mensal, and its church is considered the cathedral. The other places of worship are large, and some of elegant structure. There are friaries of the Augustine, Dominican, and Franciscan orders, all of which have large chapels attached to them. Nearly nine-tenths of the inhab. are Catholics. The Presbyterians, Quakers, Wesleyan and Primitive Methodists, and Independents have each a place of worship. The literary and scientific institutions are the Limerick Institution, the Mechanics' Institute, and the Literary and Scientific Society. Those for charitable purposes connected with education are the Bluecoat school, founded in 1717, and free schools attached to the parishes and friaries, in which great numbers of children are instructed. No fewer than 1,200 children are educated in the schools of the 'Christian Brothers,' to whom the city is much indebted. There are also schools founded on bequests of Mrs. Villiers and Dr. Hall. In the Old Town is a school for females, conducted by the 'Sisters of Mercy,' assisted by a small grant from the Education Board: a Sunday school is also established in it, for the females employed during the week at the lace factories. In the New Town is a large female school, conducted by the nuns of the Presentation Convent. In another school for females, 120 poor children are educated and clothed. The other charitable institutions are the county hospital; Barrington's Hospital and City of Limerick Infirmary, a large building, containing 125 beds, built and munificently presented to the city by Sir Joseph Barrington and his four sons; the Lunatic Asylum for Limerick, Clare, and Kerry, opened in 1822, cost about 30,000*l.*; it has accommodation for about 340 patients. Here is also a fever and lock hospital, and a lying-in hospital; several endowed almshouses; a Magdalen asylum; an asylum for the blind; a mendicity institution; a charitable loan fund; and a charitable pawn-office, founded by Matt. Barrington, esq., on the plan of the *Mont-de-Piété* at Paris. The Limerick union workhouse, opened in 1841, is on a large scale, being fitted to accommodate 3,450 inmates. Places of public amusement are not much encouraged. The theatre, a handsome building, was sold to the Augustine monks, and has been fitted up by them for a chapel, and a suite of assembly-rooms is applied to other purposes; but there is a small 'circus,' occasionally used as a theatre. The hanging gardens, built by Mr. Roche, are formed of tiers of terraces, raised upon arches, on the uppermost of which is a range of greenhouses, commanding a fine view of the city, river, and adjacent country. Limerick is the headquarters of the SW. military district, and has barracks for 1,450 men.

The old corporation, which laid claim to prescriptive privileges, confirmed by a series of charters from the time of King John, consisted of a mayor, two sheriffs, and an indefinite number of aldermen, burgesses, and freemen. The corporation now consists, under the Municipal Reform Act, of a mayor, ten aldermen, and thirty councillors. The city sent two mems. to the Irish H. of C.; and from the Union to the passing of the Reform Act it sent one member to the Imperial H. of C. The last-mentioned act conferred on it the privilege of sending two mems. to the Imperial H. of C. Registered electors, 2,013 in 1865.

Assizes are held twice a year for the co. of the city, by the judges of circuit; courts of general sessions every quarter, and petty sessions every week, at which the mayor and city magistrates preside. A court of civil jurisdiction, which is empowered to hold pleas to any amount, is held on Wednesdays; and a court of conscience for suits under 40*s.* every Thursday. Civil bill cases are tried before the assistant barrister of the co., who holds a court for this purpose within the city twice a year. The income of the corporation amounts to between 7,000 and 8,000*l.* per annum. The city court-house is a plain building: the co. court-house, a handsome structure, was erected in 1810, at an expense of 12,000*l.* The prisons for the co. and city are within the municipal limits. The former, erected in 1821, at an expense of 25,000*l.*, has a Doric portico, and is, perhaps, the finest building in the city; it is constructed on the radiating plan, and is said to be well managed. The city gaol, a gloomy quadrangular edifice, is comparatively ill adapted for its purpose.

There are three institutions for the promotion of manufactures and trade; the chamber of commerce, a society of merchants, incorporated by royal charter in 1815, for the promotion and protection of trade, and who have expended considerable sums of money for these objects; the agricultural association; and the trustees for the

Digitized by Google

promotion of industry, in whom a fund of 7,000*l.* was vested by the London distress committee. Limerick, however, can hardly be said to have any manufactures. The linen manufacture, which had attained to some magnitude, and that of cotton, which had been introduced, are all but extinct. The manufacture of leather gloves, for which the city was once famous, has not entirely disappeared; though gloves, sold under the name of 'Limerick gloves,' are now not unfrequently made in Cork. There is a great deal of embroidering in lace, and three lace factories give employment to about a thousand females. Several large flour mills have also been erected; and the town has distilleries, breweries, tanneries, foundries, and a paper mill. Limerick has for many years been famed for its fishing-hooks, sent to all parts of the United Kingdom and America.

The great support of Limerick is her trade, which is very extensive. She is, as already stated, the great mart for the country traversed by the Shannon, and that immediately connected with it. Her exports, like those of most Irish towns, consist mostly of corn and provisions, including beef, pork, butter, and other agricultural produce. The imports consist principally of manufactured goods, coal and iron, tea, sugar, tobacco, wine, salt fish, and timber. The gross customs' duties amounted, in 1845, to 193,497*l.*; in 1848, to 201,855*l.*; in 1859, to 173,466*l.*; in 1861, to 155,213*l.*; and in 1863, to 153,797*l.*

This city has derived great advantages from the improvements made in the navigation of the Shannon, and the steamers introduced on that river. The estuary of the Shannon forms one of the finest bays in the world: vessels of very large burden approach within a few miles of the city; and ships of 400 or 500 tons unload at its quays. The port is managed by commissioners. On the 1st of January, 1864, there belonged to Limerick 27 sailing vessels under 50, and 16 sailing vessels above 50, tons, besides four steamers above 50 tons—the latter of a total burden of 1,299 tons. The total tonnage, sailing and steam, was 5,825 on the 1st of January, 1864; while, on the 1st of January, 1850, it amounted to 13,829, showing an immense decline within the 14 years.

Limerick was formerly fortified, and, from its commanding the first bridge above the embouchure of the Shannon, was an important military station. It was occupied, after the battle of Aghrim, by the troops of James II.: it capitulated to the English army under Ginkell, afterwards earl of Athlone, on the 3rd of October, 1691. The capitulation, or, as it has been usually called, the treaty of Limerick, was very favourable to the besieged, or, at all events, to the Catholics. But it was afterwards most shamefully violated by the conquering party, and its most important stipulations were openly set aside and trampled upon. The remains of its fortifications add considerable beauty and interest to this ancient city. 'King John's Castle,' from which the city arms are taken, forms part of the castle barracks, and the stone upon which the capitulation was signed is still in existence, and is regarded with watchful care by the citizens.

LIMOGES (an. *Lemovicum*), a city of France, dép. Haute Vienne, of which it is the cap., on the declivity of a hill, at the foot of which is the Vienne, which is here crossed by an old stone bridge of six arches, 110 m. NE. Bordeaux, and 215 m. SSW. Paris, on the railway from Paris to Bordeaux. Pop. 51,053 in 1861. Limoges is divided into the 'city' and the 'town.' The former occupies the site of the ancient Celtic and Roman city near the river, and is ill built; its streets being narrow and ill paved, and its houses built of wood above the ground floor. The latter division, which is of modern date, on the upper part of the hill, is open, well built, surrounded with pleasant promenades, and particularly healthy. The cathedral, built in the 13th century, is of granite, and in the Gothic style. It has an imposing appearance at the first glance; but, when examined in detail, it presents many incongruities. Another church, which stands in the highest part of the town, has an elegant steeple, 226 ft. in height, a conspicuous object at a great distance. The bishop's palace is a handsome modern granite building, surrounded with gardens. Limoges has a good town-hall, several hospitals, an exchange, mint, theatre, prison, cavalry barracks, public baths, and many public fountains. One of the latter, the *Fontaine d'Aigoulène*, has a basin 38 ft. in circ., supposed to be hewn out of a single piece of granite, and supplies the upper part of the town with abundance of good water, derived from an ancient subterranean aqueduct. Besides this aqueduct, few Roman antiquities are found in Limoges: the site of an amphitheatre, the traces of which existed in 1823, is now occupied by the *Place d'Orsay*. Limoges is the seat of a prefecture and royal court, tribunals of primary jurisdiction and commerce, and a chamber of manufactures. It has a royal college, university academy, diocesan seminary, royal societies of agriculture, arts, and sciences, schools of drawing and commerce, a public library with 12,000 vols., museums of natural history, antiquities, the fine arts, and machinery, a *mont-de-piété*, and many charities. Its manufactures, which are important, include glass and earthenware, broad cloths, cassimeres, druggets, and other woollen fabrics, calicoes, cotton, linen, and hempen yarn, hats, wax candles, cards, paper, glue, and other articles. It has numerous tanneries, cotton and woollen dyeing houses, and iron forges: its wax bleaching factories rival those of Mans, and its brandy and liqueurs are in high repute. Being situated at the junction of several great roads, it is an entrepôt for the trade of several déps. with Toulouse and the S. of France, and deals extensively, not only in its own manufactured goods, but in agricultural produce, salt, iron, copper, and brass wares. Marshal Jourdan, and Dupuytren, the famous surgeon, were natives of Limoges.

LIMOUSIN, one of the old provs. of France, in the central part of the kingdom, now distributed among the déps. of Corrèze, Creuse, Haute Vienne, and Dordogne.

LIMOUX, a town of France, dép. Aude, cap. arrond., on the Aude, 13 m. SSE. Carcassonne, on a branch line of the railway from Toulouse to Cette. Pop. 6,937 in 1861. The town is generally well built, paved, and lighted, and has a large parish church, a hospital, two public halls, a theatre, and a small picture gallery. It is the seat of tribunals of primary jurisdiction and commerce, and a chamber of manufactures. Its woollen manufactures produce annually from 11,000 to 12,000 pieces of broad cloth: it has also several woollen yarn factories, tanneries, and oil mills; and is an entrepôt for iron goods, in which, and in wines, oil, soap, and leather it has an active trade. Its environs are highly picturesque and fertile.

LINCOLN, a marit. co. of England, on the E. coast, having N. the Humber, E. the German Ocean, S. the cos. of Cambridge, Northampton, and Rutland, and W. Leicester, Nottingham, and York. This is a very extensive co., comprising 2,776 sq. miles, or 1,775,457 acres, of which about 1,465,000 are arable, meadow, and pasture. Though

Digitized by Google

but little diversified in respect of surface, Lincoln is naturally divided into the districts of the *Wolds*, the *Moors*, and the *Fens*. The Wolds, a ridge from 8 to 10 m. in breadth, extend from Spilsby N. to Barton on the Humber; the soil is principally sandy loam on a chalk bottom, of very various degrees of fertility, but now much improved, and generally producing very excellent crops. The Moors stretch N. and S., from the Humber to Grantham; the heath by which they were formerly covered has now mostly disappeared, and they are very productive of oats. The Fens comprise all the flat parts of the co., from Wainfleet on the Wash round by the mouth of the Nen to the borders of Rutland: most part of this district is usually included within the great level of the Fens. (See BEDFORD LEVEL.) Lincoln is one of the most productive cos. in the empire; and improvements of all sorts have been prosecuted in it for many years past with extraordinary spirit and success. Large tracts in the Wolds and Moors, which sixty years ago were all but unproductive, now yield heavy crops of barley, oats, and turnips. This great improvement has been chiefly brought about by the liberal use of bone manure, which has been applied for a longer period and on a more extensive scale in this than in any other co.

The excellence of the pastures in the Fens is well known; immense sums have been expended on their drainage, and in the recovering of land from the sea. Formerly the Fens were frequented by vast numbers of aquatic fowl; but since their drainage these have much fallen off, and the *decoys* for their capture are now of much less importance: geese, however, are still bred in considerable numbers, and are regularly plucked four or five times a year for their feathers. Previously to the improvement of the Wolds, rabbit warrens were very common, but they are now comparatively scarce. The native sheep of the Fens were remarkable for their size and the extraordinary length of their wool; they have, however, been so much crossed with New Leicesters, that it is difficult to find one of the genuine breed. Some of the finest of the London dray-horses are bred in the Fens. The cattle depastured in the Fens are principally short-horns, and attain to a great size.

Property very variously divided, there being estates of all sizes, from 25,000*l.* a year down to 5*l.*, but the great majority small. In the district called the Isle of Ancholme, in the NW. part of the co., between the rivers Trent and Ancholme, the inhab. live together in hamlets or villages as in France, and almost every householder is a proprietor, their properties varying from 1 to 50 acres. They are very industrious and thrifty. Size of farms various: in the Wolds and Moorish district they are mostly very large, but elsewhere they are rather small. They are generally held under leases of 7 and 14 years. Manufactures and minerals of little importance. The custom of *borough English*, by which, if the father die intestate, the younger son succeeds to the paternal property, to the exclusion of his elder brothers, prevails at Stamford in this co. Principal rivers, Trent, Witham, Welland, and Ancholme. The Witham has been made navigable from Boston to Lincoln; and the Fossdyke canal extends from the latter to the Trent, near Torksey, completing an internal navigation between the Wash and the Humber. The co. is popularly divided into the parts of *Lindsey* on the N., *Kesteven* on the SW., and *Holland* on the SE., and contains 33 hundreds, wapentakes, and sokes, with the city of Lincoln and the bors. of Stamford, Boston, and Grantham. It is divided into 629 parishes, and sends 13 mems. to the H. of C., viz. 4 for the co., 2 for the city of Lincoln, 2 each for the bors. of Boston, Grantham, and Stamford, and 1 for Great Grimsby. Registered electors for the co., 21,632 in 1865, being 12,372 for North Lincolnshire, and 9,260 for South Lincolnshire. At the census of 1861, the co. had 86,626 inhab. houses, and 404,143 inhabs., while in 1841 it had 72,964 inhab. houses, and 362,602 inhab. Gross annual value of real property assessed to income tax under schedule (A) in 1862: for North Lincolnshire, 1,650,176*l.*, and for South Lincolnshire, 1,398,096*l.*

LINCOLN, a city, par. and mun. bor., and market town of England, cap. of the above co., on the Witham, 36 m. S. Hull, and 121 m. N. London by road, and 138¼ by Great Northern railway. Pop. of city, 20,999 in 1861. The city is situated on the S. slope and at the foot of a hill, on the top of which is the cathedral, a striking object for many miles round. The streets are irregularly laid out; the largest and handsomest runs N. and S. up the hill on which the cathedral stands. A small part of the town, comprising two pars., is on the S. side of the river, and is connected with the main body by one principal and two smaller bridges. The streets are well paved, lighted with gas, and supplied with water from public conduits. The principal and most interesting public building is the cathedral, erected at different times, from the 12th to the 15th century, and exhibiting several varieties of architecture: the prevailing style, however, is early English, of a particularly rich and beautiful character. The closeness of the surrounding buildings is a great disadvantage to the display of architectural effect; but there is a tolerably open space towards the E. The church consists of a nave with its aisles, four transepts, a choir, chancel, and ladye-chapel: three towers rise above the building, two at the W. end, 180 ft. high, and one at the intersection of the nave and transepts, rising 303 ft. above the floor: they are all gorgeously decorated with varied tracery, pillars, pilasters, and windows. The W. and principal front, in which are three fine doors, is distinguished by its beauty and magnificence; and, from the variety of its styles, is certainly the workmanship of three distinct and distant eras. The interior dimensions are as follows:—'Entire length, 482 ft., of which 222 ft. belong to the nave, and the rest to the choir and ladye-chapel; width of choir and nave, 80 ft.: height of ditto, 80 ft.; and width of W. front 174 ft.; length of principal transepts, 222 ft.; breadth of ditto, 66 ft. The great transepts, at the ends of which are circular windows, exhibit a good specimen of the English style; and the aisles on the E. side are divided into chapels and vestries: the choir, which is parted off from the nave by a stone screen, is of most elaborate composition; and the great E. window ranks as the second in England, in point of size and fine proportions. Attached to the E. side of the cathedral is the chapter-house, a structure differing from most others of the same nature in being *ten-sided*, and not octagonal: its groined roof is supported by an umbilical pillar, consisting of a circular shaft, cased by ten small fluted columns. The cloisters are on the N. side, and over them is the library, built by Dean Honeywood, at the end of the 17th century, containing a large collection of books, with some curious specimens of Roman antiquities. The cathedral bell, or 'Great Tom of Lincoln,' originally cast in 1610, having been cracked, was recast, with 6 other bells, into the present large bell and 2 quarter bells. The diameter of the great bell is 6 ft. 10½ in., and its weight 5½ tons, or about a ton

Digitized by Google

heavier than the old one. At the time of the dissolution, Lincoln cathedral was one of the finest and most sumptuously adorned in the kingdom. There were then taken from it 2,621 oz. gold, and 4,285 oz. silver plate, besides precious stones of great value. It had formerly many costly sepulchres and monumental records; but the zealots at the Reformation either pulled them down or defaced them, so that, in 1549, scarcely a perfect tomb remained; and the little they left undestroyed was demolished by Cromwell's soldiers, by whom the cathedral was converted into barracks. The ruins of the bishop's palace, which was destroyed at the last mentioned epoch, stand S. of the church, and comprise a fine hall, an old gateway, and part of the kitchen. Adjoining these ruins, a modern house has been erected, which is occupied by the bishop during his stay in Lincoln. (See Britton's Account of Lincoln Cathedral.)

Among the tombs yet in a tolerably perfect state are those of Catherine Swinford, wife of John of Gaunt, duke of Lancaster, of their daughter Joan, and of several bishops and deans of the cathedral. The present establishment comprises a bishop, dean, precentor, subdean, chancellor, and 38 prebendaries, with 4 vicars-choral and 20 choristers. The cathedral revenues, which nett 6,986*l.* a year, are equally divided between the dean, precentor, subdean, and chancellor; and the vicars-choral divide 115*l.* yearly. Besides monasteries, nunneries, and other buildings devoted to pious uses, Lincoln had formerly upwards of 50 churches; but of these only 12 remain, exclusive of the cathedral, most of them being small and much mutilated. St. Peter's at Gowts, evidently an old conventual church, and 3 other churches S. of the Witham, have lofty square Norman towers. Some new churches have been recently built by subscription. There are several places of worship for R. Catholics, Wesleyan Methodists, and other Dissenters, and attached to them are Sunday schools. The national school (also a Sunday school) has, on the average, above 500 pupils. The grammar school, held in the Grey Friars chapel, was founded in 1583: it is well endowed, and the instruction, not confined to classics, is given by an upper and under master, who, in addition to their salaries from the corporation, receive fees from the boys, and take boarders. The Bluecoat school, established in 1602, is endowed with landed property worth above 2,000*l.* a year, and furnishes clothing and instruction (with apprentice-premiums on leaving) to 56 boys. Wilkinson's school furnishes instruction to 16 boys. Lincoln is very rich in endowed charities, among which, as one of the principal and most useful, may be mentioned Sir Thomas White's loan-fund, for deserving and needy tradesmen, the assets of which are estimated at 850*l.* A general dispensary, lunatic asylum, county hospital, and lying-in hospital, are the chief modern charities; and a flourishing mechanics' institute, several libraries, 2 news-rooms, and some book societies, are well supported. Among the buildings devoted to civil purposes are the co. gaol and court-house, rebuilt from Smirke's designs, on the site of the old castle, a few remains of which are still standing on the hill W. of the cathedral. The co. gaol, constructed on Howard's plan, is well conducted. The guild-hall is an ancient Gothic building, but the borough court-house is modern, and the gaol is stated to be too small to admit of the classification of prisoners. The market-house, a small theatre, and an assembly-room, are the only other public buildings; but there are several markets. W. of the town is a good race-course, near which is a large building now dismantled, but used during the late war as a military *dépôt*. As respects ancient remains, few towns in England exhibit so many and so interesting as Lincoln. Saxon, Norman, and pointed arches, doorways with turrets, walls, mullions of windows, and other fragments, appear in every direction. Leland says there were '5 gates in the waulls of the citie;' and of these the Chequer Gate in the Close, and the Stonebow crossing the High Street, are still in good preservation. John of Gaunt's palace and stables present some good examples of the Norman and early English style.

The trade of Lincoln consists chiefly in the exchange of the raw produce of the surrounding district for manufactured and other commodities. Large quantities of flour are sent to Manchester and London. There are some tanyards, malthouses, and tobacco manufactories, and extensive breweries produce excellent ale. It communicates by the Foss-dyke canal with the Trent; and the Witham navigation, running SE. past Boston, connects it with the North Sea. It has two railway stations, and is connected by railways with all parts of the country.

Lincoln received its first charter from Henry II., which was confirmed by several subsequent monarchs, its governing charter till 1837 being that of Charles I. Under the Municipal Reform Act the city is divided into 2 wards, and is governed by 6 aldermen (one of whom is mayor), and 18 councillors. It has also a commission of the peace under a recorder. The assizes and quarter sessions are held for the city and co. Corporation revenue 6,086*l.* in 1862.

Lincoln has regularly sent two mems. to the H. of C. since the reign of Henry III., the electors previously to the Reform Act being the freemen of the city. The Boundary Act includes the insulated part called the bail and close in the parl. bor.; and those districts round the city called the liberties, which previously had not been represented, were added to the co. Registered electors 1,688 in 1865. Lincoln is likewise the election town for the N. division of the co.

Lincoln stands on the line of the great Roman road called *Ermine Street*, and derives its name from its occupying the site of the Roman military station called *Lindum*. It was fortified by the Saxons; and, at the time of the Domesday survey, was one of the richest and most populous cities of England, having 1,070 houses and an extensive trade. The castle was built by William the Conqueror in 1086; and the prosperity of the town was further advanced by Henry I., who cleared out the foss-dyke, and made it navigable. The town was annexed to the duchy of Lancaster at the end of the 13th century; and, about the middle of the 14th century, it was inhabited by the celebrated John of Gaunt, duke of Lancaster, who not only improved the castle, but procured for the town many valuable privileges. In the civil wars of Charles I. the king came to Lincoln, and convened the nobility and freeholders of the co. The inhabitants promised to support the royal cause, but in 1643 the city was in the hands of the parliamentarians. The royalists recaptured it, but were again dispossessed, both of the town and castle, on the 5th of May, 1644.

LINDFIELD, a town and par. of England, co. Sussex, hund. Burley-Arches, rape of Pevensey, 14 m. N. by E. Brighton, and 33 m. S. London. Pop. of par. 1,917 in 1861; area, 5,350 acres. The town deserves notice for its useful institution for instructing poor children of both sexes not only in reading and writing, but also in the processes of agriculture, and various manual operations, as spinning and netting, printing and shoemaking.

Digitized by Google

There is a benevolent society, giving pecuniary and other relief to poor persons not willing to receive parochial aid. The church is an old structure of plain exterior, with a low square tower; the living is a curacy in the gift of the archbishop of Canterbury. There are two places of worship for Dissenters. Fairs for cattle and horses, May 12; and for sheep and lambs, Aug. 5.

LINGEN, an isl. of the E. Archipelago, off the NE. coast of Sumatra, lying on the equator, and near lat. 105°. It is about 50 m. in length, by 30 in its greatest breadth; having a healthy climate, and producing abundant supplies of fruit and poultry. Its geological formation indicates the presence of tin, and it furnishes some little gold. Its inhabs. may be considered as presenting the type of the Malay race in its greatest purity.

LINLITHGOW, a royal and parl. bor. of Scotland, co. Linlithgow, of which it is the cap., in a valley on the S. bank of a lake of the same name, 15 m. W. by S. Edinburgh, on the railway from Edinburgh to Glasgow. Pop. 3,693 in 1861. The town consists of one main street, along the line of road between Edinburgh and Falkirk, with several lanes branching off on both sides. The houses, with few exceptions, have an ancient and decayed appearance; the streets are lighted with gas, and macadamised. In addition to the town-hall and gaol, the most prominent public building is the parish church, erected in the 12th century, but afterwards much enlarged and repaired. This, which is one of the best specimens of Gothic architecture in Scotland, is 182 ft. in length, 100 in breadth, including the aisles, and 90 in height, exclusive of the steeple; the latter, rising about 140 ft. above ground, terminates in an imperial crown. The exterior had formerly a row of statues, of which one only remains, that of St. Michael, the tutelary saint of the borough. It is divided by a partition wall, the eastern half only being used as the parish church, the other is unemployed.

The royal palace of Linlithgow is finely situated on an eminence projecting into the lake. This magnificent ruin is of a quadrangular form. It was begun so early as the 12th century, and was greatly enlarged and improved by James V.; but was not finished till the reign of James VI. (James I. of England), who built the N. side of the quadrangle, after his visit to Scotland in 1617. The W. side of the palace is the most ancient, and here the apartment is still pointed out where the unfortunate Queen Mary first saw the light on the 7th of December, 1542. The palace was entire and habitable till 1746, when it was burnt, either intentionally, or through accident, by the troops under general Hawley. It covers an acre of ground, and though roofless, ruined, and desolate, its appearance sufficiently justifies the not very poetical eulogium of Scott:—

> 'Of all the palaces so fair,
> Built for the royal dwelling,
> In Scotland, far beyond compare,
> Linlithgow is excelling.'
> Marmion, canto 4, stanza 15.

The hexagonal Cross Well, in front of the town-house, about 20 ft. in height, is surmounted by a lion rampant supporting the arms of Scotland. The sculpture, by which it is adorned, is very complex; and the water is made to pour in great profusion from the mouths of 13 grotesque figures. This well, constructed in 1805, is said to be a facsimile of one previously existing, constructed in 1620.

The Free Church, the Associate Synod, and Independents have places of worship. The poor, as in other Scotch towns, are supported partly by the interest of certain funds left in mortmain for the purpose, and by the church collections, and partly by a rate. There is a bor. school endowed by the town, but no parish school. There are sundry schools in the parish, all unendowed except the one referred to; and it is supposed that about 1-9th part of the pop. is at school. There are various reading-rooms and a mechanics' library. Linlithgow has little or no trade, but depends chiefly on its advantages as a provincial capital. Tanning and preparing leather, said to have been introduced by the soldiers of Cromwell, is the oldest and the staple branch of business, giving employment to nearly 100 hands. There are two extensive distilleries, a brewery, and a small glue manufactory, and a few hand-loom weavers (cotton and linen). The Union Canal, between Edinburgh and Glasgow, and the Edinburgh and Glasgow railway, pass close along side the town. Blackness, on the Frith of Forth, 5 m. distant, is its port.

Linlithgow was made a royal bor. in the 12th century. In 1513, in an aisle of the par. church, the apparition is said to have appeared to James IV., that warned him against the expedition into England which terminated in the fatal battle of Flodden. (Pitscottie's Hist. of Scotland, i. 264, 265.) When passing through this town, on the 23d Jan. 1570, the Regent Murray (illegitimate brother of Q. Mary) was shot by Hamilton, of Bothwellhaugh, partly in revenge for a private injury, and partly from political motives. The house whence the shot was fired has been taken down and replaced by a modern edifice. The White or Carmelite Friars had a monastery here, founded in 1290; but all traces of it have disappeared. In addition to certain town dues, the municipal property consists chiefly of land; and the ancient custom of annually *riding the marches*, though disused in almost every other bor. in Scotland, is here regularly observed. Corporation revenue, 380*l.* in 1863–4; number of councillors, 16. Linlithgow unites with Falkirk, Airdrie, Lanark, and Hamilton, in sending a mem. to the H. of C. Registered voters 131 in 1865.

LINLITHGOW. See LOTHIAN (WEST).

LINTON, a market town and par. of England, co. Cambridge, hund. Chilford, 10 m. SSE. Cambridge, 42 m. N. by E. London, on the Great Eastern railway. Pop. of par. 1,833 in 1861. Area of par. 3,663 acres. The town, which stands on the line of a Roman road, and at the foot of the chalk downs communicating with the Chiltern range, comprises several irregular streets and lanes, lined in part with good brick houses, but with a much greater number of low thatched cottages. The church is a low structure in the pointed style with a high embattled tower and handsome interior, the living being a vicarage in the gift of the bishop of Ely. There are places of worship, also, for Wesleyan Methodists and Baptists, and two Sunday schools, one of which belongs to the church. The market house is a small square building. Tanning is the chief trade of the place, and in the neighbourhood are extensive nursery grounds occupied by gardeners, florists, and seedsmen, who take their produce to the Cambridge market. Markets on Thursday; fairs for horses and lambs, Holy Thursday and July 30.

LINTZ, or LINZ, a city of the Austrian dom., cap. of Upper Austria, on the Danube, 41 m. SE. Passau, and 96 m. W. by N. Vienna, on the railway from Vienna to Munich. Pop. 30,323 in 1857. Linz consists of the city proper and three suburbs, which, as in Vienna, are more extensive

Digitized by Google

than the city itself. The houses are stuccoed and painted, chiefly white, but many yellow or light brown. Almost all have architectural decorations and columns, friezes over the windows, and Venetian blinds outside. Balconies with flowers meet the eye at every turn; and not only on the broad, spacious 'Place,' but in the back streets also, the houses are lofty and elegant. The principal streets are wide and regular, though most of them badly paved, and the houses shingle-roofed. Linz has few remarkable public buildings. The churches are generally handsome; several have glittering cupolas, and many are richly gilded and adorned with good paintings. The *Landhaus*, formerly a Franciscan convent, is the place of assembly for the states of the prov., and accommodates the principal government offices. The *schloss*, or castle, on an eminence overlooking the Danube, was once the residence of the dukes of Austria, but is now the prison and penitentiary for the prov. A bridge, 280 yards in length, connects the city with the opposite bank of the Danube. In the principal square is a marble column, erected in 1723, between statues of Jupiter and Neptune, to commemorate the escape of the city from the double attack of the plague and the Turks.

Lintz is among the few German towns not encircled with continuous walls. Under the superintendence of the late archduke Maximilian, it has been surrounded with a chain of 32 isolated forts, 23 being on the right, and 9 on the left bank of the Danube, at the distance of 1, 2, or 3 m. from the town. They communicate with each other by a covered way, and are placed at regular intervals in the plain or along the slopes and tops of the hills, in a circuit of 9 m. The highest eminence near the city, the Pöstlingberg, on the opposite side of the Danube, is surrounded by a circlet of 5 towers, forming a citadel. Each tower is 30 ft. high and 80 ft. in diameter, built within a hill of sand, and sunk into the earth, so that the roof alone projects; and each has a glacis on the side farthest from the town. Each consists of 3 stories, the lower serving as a storehouse and a powder-magazine, the middle as a lodging for troops, the third being the platform on the summit, which, when not used, is covered by a temporary roof. The platform is mounted with 10 guns, so arranged that they can be brought to bear upon any point with the greatest facility, and command the glacis by a cross-fire in every direction.

Lintz is the seat of the provincial government, and the assembly of nobles for Upper Austria, and of tribunals and councils for the Mühl circle and the city, and is the see of a bishop. It has a lyceum, where courses of lectures are given in theology, philosophy, and medicine: the library belonging to this institution comprises about 40,000 vols. Drawing-schools and collections of mathematical and philosophical instruments are attached to the lyceum. It has also a gymnasium, an ecclesiastical seminary, a provincial academy of arts, an imperial collection of economical models, a normal high school, and school of arts, with 3 subordinate schools, 2 military schools, a school of engineering, a female school attached to the convent of the Ursuline nuns, and other seminaries; a military and another large hospital, various charitable institutions, a private deaf-and-dumb asylum, and a musical society, with large barracks, a custom-house, a bank, and a small but fine theatre. The public gardens in the vicinity are favourite places of resort.

Lintz has a large imperial factory of broad cloth, carpets, and other woollen stuffs, which occupies 7 contiguous houses, and is said, at one period, to have employed directly and indirectly 23,000 individuals; but the introduction of machinery has since occasioned a material diminution of the numbers employed. Considerable quantities of the red woollen caps made here are sent to Turkey. Lintz has other woollen factories, with manufactures of cotton and silk goods, leather, gold lace, cards, and tobacco. Two fairs are held annually, one at Easter and the other at the Assumption; and the transit trade by the Danube, since Lintz became a station for the steamers on the river, is very considerable. Two railways meet at Lintz: one goes N. to Budwies in Bohemia, 67 m., and was one of the first constructed in Germany, and the other to Salzburg and Munich.

Lintz is supposed to have been known to the Romans, and it is said to possess some Roman antiquities. It was purchased by Leopold II., margrave of Austria, in 1036. In 1626, during the civil war of Upper Austria, it opposed a long and successful resistance to Fahdinger, the peasant leader, who was mortally wounded before its walls. The suburbs were then, however, destroyed by fire, and the castle and a part of the city suffered severely from the same cause in 1800.

LIPARI ISLANDS, a group in that part of the Mediterranean, called the Tyrrhenian Sea: they are a dependency of Sicily, from the N. coast, of which they are from 10 to 40 m. distant, forming a part of the intend. of Messina, between lat. 38° 20′ and 38° 55′ N., and long. 14° 15′ and 15° 15′ E. Aggregate pop. of the group estimated at 22,000, of whom about 12,500 belong to the town of Lipari. There are 7 principal islands, Lipari, Vulcano, Stromboli, Salini, Panaria, Felicudi, and Alicudi, and a number of adjacent islets and rocks. They are all mountainous, rising abruptly on their W. side, and shelving down gradually towards the E.; and, in addition to this uniformity, each island, with scarcely an exception, has a high isolated rock off its N. shore, a peculiarity extending even to the distant isle of Ustica. They are evidently of volcanic origin, being composed chiefly of hornstone and granite, covered with lava, scoriæ, pumice stone, and other volcanic products. Stromboli (which see), the most northerly of the islands, has the only volcano in Europe which is in constant activity. Lipari and Vulcano have also craters in which volcanic phenomena are occasionally manifest. Dolomieu and others suppose, with some show of reason, that Panaria, and the adjacent islets of Dattolo, Basiluzza, Lisca, &c., which are circularly disposed, once formed parts of the rim of the crater of an immense volcano, which has now disappeared under the waves, but which may have been the *Evonymus* of the ancients. (Dolomieu, pp. 105–108.)

The climate is highly salubrious, and the air pure and refreshing; storms and earthquakes are, however, frequent. Where the volcanic substances have been decomposed so as to form soil, it is very fertile; but it absorbs moisture so rapidly, that the inhab. are obliged to construct capacious cisterns, in which rain-water is carefully preserved for irrigation and other purposes. Lipari, the central and largest of these islands, is about 18 m. in circuit. It was peopled by a colony of Cnidians, and is described by Strabo as having a fleet, and commanding the other islands. (Strabo, lib. vi.) Its interior is rugged and broken, presenting hills of vitrified volcanic substances, which, though at least 3,000 years old, present no symptoms of decomposition; but it has, notwithstanding, two considerable plains and some deep valleys, which are well cultivated and productive. Exclusive of about a three months' supply of corn, it produces large quantities of fruit, especially grapes, with figs, prickly pears, olives, &c.: it also produces cotton,

Digitized by Google

beans, and peas. Some wine is made; that called Malvasia being highly esteemed in Naples. Most of the grapes are, however, converted into raisins: they are prepared by placing the ripened grapes in an alkaline ley of ashes, more or less impregnated with salt, and afterwards exposing them to the meridian sun. By this means, an extremely luscious raisin is produced. The agricultural products of the other islands are much the same as those of Lipari: in some, a few oxen are reared, but cattle are generally scarce and lean, the pastures being fit only for goats. Lipari was celebrated in antiquity for its hot springs and sudatories; they are now, however, but little used. The only spring in the island is hot. (Russell's Sicily, p. 274.) Lipari is the great magazine whence Europe is supplied with pumice-stone, its surface being almost wholly composed of that singular substance. Though so abundant in that island and Vulcano, pumice-stone is not found either in the neighbourhood of Etna or in the regions of extinct volcanoes on continental Europe, and only in small quantities in Vesuvius. It is of various kinds and degrees of specific gravity, one variety being so light as to float on water. It is used to polish marble, metals, pasteboard, &c., and fetches from 8*l.* to 10*l.* a ton in the London market. Other volcanic products, as sulphur, nitre, sal ammoniac, pozzolana, bitumen, &c., are among the chief exports from the Lipari Islands, and in these an active trade is carried on. The principal crater in Vulcano, the most S. of the islands, is covered with efflorescences and incrustations of the above products. Alum, however, which was formerly a great staple, and from which the Romans anciently derived a considerable revenue, and the Lipariot merchants great profits, now scarcely exists as an article of commerce: the failure of its production is supposed to be owing to a diminution in the intensity of the subterranean fires.

Sulphur is still exported, but not to the extent that it might be, from the notion that the vapour arising from its purification infects the air and injures vegetation. Salina is so called from the salt-pans on its SE. shore, which produce enough of that article for the supply of all the islands. The *pinna marina*, from whose silky filaments the Romans made imperial robes, abounds on the shores of Salina. Next to pumice stone, wine, raisins, currants, olives, salt, and sulphur, soda, capers, coral, and fish are the chief articles of export. The natives are generally poor, though few are in the extreme of poverty. They are industrious, hardy, and make good seamen; but they are immoral, filthy in their habits, and infested with scabies. (Dolomieu, Voyage aux Iles de Lipari, 1–140; Smyth's Sicily, 248–279.)

These islands were called *Hephæstiades* by the Greeks, and *Vulcaniæ* by the Romans, from their emitting smoke and flames; such places being supposed to be either inhabited by, or under the immediate protection of, Vulcan. Vulcano, however, was more especially sacred to the god of fire, and is said by Virgil to be

'Vulcani domus, et Vulcania nomine tellus.'

They were also frequently called *Æolian* Isles, from Æolus, one of their sovereigns. This prince having learned, according to Pliny, to foretell, from observations made on the smoke of the volcanoes, the coming changes of the winds, was said by the poets to have the latter under his command. (Hist. Nat., lib. iii. cap. 9.) Virgil has described the power and functions of Æolus, as ruler of the winds, in one of the finest passages of the Æneid:—

'Hic vasto rex Æolus antro
Luctantes ventos tempestatesque sonoras
Imperio premit ac vinclis et carcere frenat.
Illi indignantes magno cum murmure montis
Circum claustra fremunt. Celsâ sedet Æolus arce,
Sceptra tenens, mollitque animos et temperat iras.
Ni faciat, maria ac terras cœlumque profundum
Quippe ferant rapidi secum verrantque per auras.'
Æneid, i. lin. 56–63.

LIPARI, the cap. town of the above group of islands, and of a canton under the intend. of Messina, in Sicily, on a steep declivity on the E. side of Lipari Island; lat. 38° 27′ 56″ N., long. 14° 57′ 50″ E. Pop. 19,237 in 1862. The town is healthy but crowded, irregular, and dirty, with narrow streets and ruinous public edifices; of which last the finest are the Capuchin convent, a hospital, a nunnery, and the bishop's palace. The castle, which encloses the cathedral and some other edifices, is erected in a commanding situation, on the summit of a huge volcanic rock. From fragments of a Cyclopean wall and other remains, it is conjectured that this was the identical Acropolis which the Romans, about *anno* 259 B.C., attempted to carry by escalade, but were repulsed and driven back with great loss by the Carthaginians under Hamilcar. The greater part of the present fortress was built by Charles V., after Barbarossa had plundered the town in 1544. The cathedral is a neat edifice, but has been much injured by lightning. A college is established here, under which are 8 schools in different parts of the islands. Several Greek and other antiquities exist in and round the town: an excellent statue on the Marina, supposed to have been erected in honour of Timasitheus, has, 'by the addition of a copper nimbus, been converted into a saint.' Lipari has an active trade in the produce of the islands with Messina, Palermo, Naples, &c. Its bay or harbour, nearly 2 m. in circuit, has deep water and tolerably good holding ground, but, from want of a mole, it is not at all times secure. (Smyth's Sicily, 263, 264, and Appendix.)

LIPETZK, a town of Russia in Europe, gov. Tambof, on the Voroneje, an affluent of the Don, 80 m. W. by S. Tambof. Pop. 12,335 in 1858. The town has several churches, most of them of wood. It had, at the end of the last century, an imperial cannon foundry, employing nearly 1,500 hands, but it appears to be no longer in activity. A mineral spring, frequented by numerous visitors, was converted into a spa under the auspices of Peter the Great, a statue of whom was erected in the town by one of its citizens, in 1839.

LIPPE-DETMOLD, a principality of NW. Germany, between lat. 51° 47′ 30″ and 52° 11′ N., and long. 8° 35′ and 9° 20′ E., having NE. and E. territories belonging to Hesse-Cassel, Hanover, Waldeck, and Prussia, and being elsewhere surrounded by Prussian Westphalia. Area, 445 sq. m. Pop. 108,513 in 1861. The great majority of the inhabitants, with the reigning family, are Calvinists. The country is in general hilly, especially its SW. part, where the *Teutobergerwald* separates the basins of the Rhine and the Weser. The latter river forms a part of the N. boundary: the Werra, one of its tributaries, is the other principal stream of Lippe-Detmold. The climate is one of the mildest and most agreeable in N. Germany. The mean temperature of the year, in the valleys and plains, is about 49° Fah.; and that of the winter, no lower than 35° Fah. Agriculture is the chief occupation of the inhabs. Corn, of various descriptions, beans and peas, rape seed, flax, and hemp are the principal articles of culture. The country is well wooded, particularly with oak and beech; and timber is one of its most important products. A good many sheep

Digitized by Google

and hogs, and excellent horses, are bred; and the rearing of bees is extensively pursued. About 20,000 centners of salt are annually produced from salt springs; and marble, lime, and iron are obtained in small quantities. The weaving of linen fabrics, and the spinning of linen yarn from the flax produced in the territory, partially occupy the rural pop. There are some woollen cloth and glass factories, tanneries, distilleries, and paper-mills; and Lemgo, the chief town, has a manufacture of *meerschaum* pipe-bowls. These articles, after timber, linen stuffs, and yarn, and cattle, are the chief articles of export. The government is a constitutional and hereditary monarchy, remodelled in 1836; and vested in the prince and a representative body, or diet, of 14 members; 7 elected by the nobility and knights and 7 by the inhabs. of towns and rural distr. The diet is convoked every 2 years, and no new tax can be imposed without its consent. Appeal lies from the civil and criminal tribunals of the principality to the high court at Wolfenbuttel. The people are better informed than in many parts of Germany, the princes of Lippe-Detmold having, for a lengthened period, been liberal patrons of public instruction. The gymnasium at Lemgo, and the high school and teachers' seminary at Detmold, are in high estimation, many celebrated scholars of Germany having received the early portion of their education at one or other of those establishments. Lippe-Detmold furnishes 1,202 men to the army of the German Confederation: it has one vote in the full council of that body; and, along with other small states, a vote in the committee.

Detmold, the capital, and residence of the prince, and seat of government and of the superior judicial courts, on the Werra, 54 m. E. Munster, had 4,012 inhabs. in 1861. Lemgo, on the Bega, the largest town in the principality, had, in the same year, 5,130 inhabs., with a seminary for noble females, and an orphan asylum.

LIPPE SCHAUMBURG. See SCHAUMBURG-LIPPE.

LIRIA, a city of Spain, prov. Valencia, 18 m. NW. Valencia. Pop. 8,920 in 1857. The city partly occupies a space between two hills; but it is partly, also, on an acclivity, the summit of which is crowned by the ancient public church *de la Sangre*. Another parish church, a chapel, and two monasteries are the only public buildings; and the town generally has a mean and neglected appearance. Its inhab. are principally employed in the distillation of brandy, soap-boiling, tanning, tile-making, and the weaving of linen fabrics. The neighbourhood is well irrigated, and extremely productive. The marble quarried near Liria is celebrated for its whiteness and fineness of grain. Its existence is traced by the Spaniards up to the time of the Carthaginians, who founded here the town of *Edera*. Under the Romans it was called *Edeta*, and was the cap. of the country of the *Edetani*. Having passed successively into the hands of the Goths and Moors, it was finally added to the crown of Arragon in 1252.

LISBON (Port *Lisboa*; an. *Olisipo*, and afterwards *Felicitas Julia*), the cap. city and principal seaport of Portugal, in the comarca of its own name, on the right bank, and near the mouth of the Tagus, 172 m. S. Oporto, 220 m. NW. Cadiz, and 320 m. WSW. Madrid, on the terminus of lines of railway from Oporto and Madrid. Pop. 250,682 in 1858. The city, seen from the river, covering several hills with palaces, churches, convents, and dazzling white houses, that rise more or less abruptly from the quays, has a magnificent and imposing appearance; but, when the traveller has landed, the delusion vanishes. Nothing can be more literally correct than Byron's description of Lisbon:—

> 'Whoso entereth within this town,
> That, sheening far, celestial seems to be,
> Disconsolate will wander up and down,
> 'Mid many things unsightly to strange ee;
> For hut and palace show like filthily;
> The dingy denizens are rear'd in dirt;
> Ne personage of high or mean degree
> Doth care for cleanness of surtout or shirt;
> Though shent with Egypt's plague, unkempt, unwash'd, unhurt.' Childe Harold, cant. 1.

The streets are badly paved and generally narrow, and the houses, with here and there a latticed window, have a melancholy appearance; while in filthiness and impurity of every description Lisbon may vie with Constantinople. Mrs. Baillie, who resided here for more than two years, describes its streets as sending forth 'the most pestilential effluvia. Dogs of every mongrel breed, lank, lean, and voracious, lie about the streets in alarming numbers. Indeed, Lisbon maintains no other scavengers.' The police, however, has been improved, and scavengers now cleanse the wider streets; but the greater part of the city is still worthy its ancient notoriety for the want of cleanliness and even decency. The E. quarter of the town not having been destroyed by the earthquake of 1755, is the oldest, and has very narrow irregular lanes, skirted by high old-fashioned and half-ruinous houses; but lower down in the plain to which the ravages of that calamity were confined, the town has been rebuilt in a regular manner, and excellently paved, and there are a few squares and open spaces, which contrast strikingly with the mean appearance of other parts.

Lisbon is an open town; and its suburbs are so nearly connected with it, that it is difficult to define its limits. Measuring from the small river Alcantara eastward to the termination of the continuous buildings, it is found to be about 3½ m. in length; the breadth varies from 1 m. to 1½ m., so that its total area comprises about 3,000 acres. The whole of this space, however, is not covered with buildings; for in many parts there are extensive plantations and gardens, public squares, and a vast extent of ground unoccupied except by ruins and rubbish, the monuments of the catastrophe of 1755. Some houses also have been thrown down, and others greatly injured by subsequent shocks; and there is, perhaps, no great presumption in anticipating, owing to the frequency of these phenomena, that Lisbon may one day or other again become the subject of a similar calamity to that by which it was so nearly destroyed. One of the largest squares is the *Praça do Commercio*, in the centre of which is the equestrian statue, in bronze, of Joseph I. The front, towards the river, is open, and flights of stone steps descend from it to the water: on the E. side are the custom house, E. India house, and exchange; the public library is on the W. side, and facing the river stands a fine building called the *Junta do Commercio*. The *Rocio* is another fine square, communicating with that last mentioned by several well-built and uniform streets. In this square were celebrated the *Autos da fé*, which once disgraced Portugal even more than the rest of Catholic Europe. Of these streets, one, the *Rua d'Ouro*, is chiefly occupied by goldsmiths and jewellers: the silversmiths live in the *Rua da Prata* (Silver Street), and a third is filled with the shops of cloth merchants and embroiderers. The haberdashers and other tradesmen have likewise their streets, called after the trade to which they are appropriated. Among the other squares and remarkable places of Lisbon may be mentioned

Digitized by Google

the *Praça da Figueira*, used as a market for fowls and vegetables; the *Praça das Amoreiras*, in the centre of which is a large reservoir, whence water is supplied to the various fountains of the city; and the *Praça de Alegria*, now as formerly celebrated as the Rag-fair of Lisbon. The *Salitre*, leading from the *Passeio Publico* in the N. quarter of Lisbon, forms a cool and shady promenade; the quarter of Buenos Ayres, on the slopes W. of the town, is airy and pleasant, comprising many handsome residences; and a line of good streets runs westward over the bridge of Alcantara, connecting Lisbon with the suburb of Belem. The houses above the shops, and many others also, are let in separate floors, as at Madrid and Paris; and a common passage, not remarkable for cleanliness, leads to the door and staircase of each. The police, so inefficient during the peninsular war, that Byron might correctly have pictured Lisbon as

'That purple land, where law secures not life.'

was much improved after the peace by the establishment of Novion's police; but this useful body was broken up at the time of Don Miguel's expulsion, and property as well as life are almost as unsafe as ever. The streets, with the exception of a few great thoroughfares, are scarcely lighted at all. There are plenty of fountains; but water is not used to clean the streets, and there is no attempt at sewerage. Fires are frequent; but they are not destructive, owing, in part, to the solid construction of the buildings, and in part to the unfrequent use of domestic fires, and the formation of the *agoadeiros* or Galician water-carriers into corps, stationed at different parts, to convey water from the fountains on the first alarm. These, of whom there are about 7,000, are generally employed in Lisbon to carry burdens and perform the more severe labour. The work of porters, however, at the custom-house and India house is done by the Portuguese, to the entire exclusion of the Gallegos.

Few cities of Europe are so scantily supplied with fine public buildings. The custom-house, exchange, and India-house are large and handsome; but, besides these, there are scarcely any except the churches and convents, which crown the hills, and look like palaces and fortresses. Some of the former, rebuilt since the earthquake, are very spacious, and profusely decorated in the worst taste. The principal of these are, 1. the cathedral, a large Moorish building, restored in 1770, and situated on the slope of the hill on which is the *castello*, or citadel; 2. the church *Do Coraçao de Jesus*, the largest and most sumptuous sacred edifice built since 1755, surmounted by a finely-proportioned dome, and remarkable as containing a mausoleum dedicated to its foundress, the queen Maria; 3. the ancient church of the Martyrs, erected on the spot where Alphonso I. mounted the walls of Lisbon, and took it from the Moors; and, lastly, the elegant but still unfinished church of Santa Engraçia, which not having been touched for the last fifty years, a proverb has come into use, entitling all incomplete undertakings as *obras de Santa Engracia*. Here also stands the church of San Geronimo, at Belem, built by King Emanuel in 1499, and exhibiting a fine specimen of the ornamental Gothic and Arabic styles: in the interior is a royal mausoleum. The convents, which are of large size, form a principal feature in the town; but, since the suppression of the monasteries in 1835, Lisbon has lost much of its monkish appearance; the buildings have been converted to public uses, or sold to private individuals, and the wealth has been thrown into the national treasury. The English built a Protestant chapel in 1823, contiguous to a cemetery, in which lie the remains of the celebrated Henry Fielding, who died here on the 8th of October, 1754, at the early age of 48.

Among the other public structures, the fine aqueduct of *Agoas livres* deserves mention as one of the greatest works of modern Europe, and which will bear comparison even with the grand specimens of ancient bridge-architecture. It brings water from several springs about 3 leagues NW. of the city. Its course is partly underground; but as it approaches Lisbon, and crosses the deep valley of the Alcantara, it is carried over 35 bold marble arches for a length of about 2,400 ft. The water enters the town at the *Praça das Amoreiras*, where, as before mentioned, is the great reservoir from which water is distributed to the various fountains, and whence the Galician agoadeiros draw the supplies, which they sell from house to house, and hawk about the streets. The palace of Necessidades, the residence, at times, of the royal family, is small and mean-looking, and the palace of Bemposta is equally poor. But the royal palace of Ajuda, near Belem, more recently constructed, is a large building, and, notwithstanding its faults of architecture, may rank as one of the finest in Europe. The arsenal, post-office, mint, corn exchange, two public hospitals (one of which, called the hospital of San Joseph, is extremely well conducted, and has accommodation for 1,500 patients, with an attached school of medicine), the nobles' college, and the palace of Calhariz, are the only other national buildings of any importance, except the theatres. The opera-house of San Carlos is a large building of good proportions, with a noble box in the centre for the royal family. There is a theatre for the performance of the national drama; but it is small and mean, and the plays, as well as the performers, are of a very inferior character. Lisbon also, like Madrid and Seville, has a bull-ring, the size of which, however, will bear no comparison with the latter, nor are the performances so splendidly appointed or well managed. It must be observed, however, that the people of Lisbon visit the opera rather in obedience to fashion than from any desire for amusement: the bull-fights are not attended, as in Spain, by the *élite* of society, and the national drama is chiefly supported by the middle classes. Out-of-door amusements are seldom sought, except water excursions, in which the people generally take great pleasure. The shores of the Tagus are most beautiful; the country on the opposite side offers many interesting objects, as Almada, Barreiro, Seixal, Setubal, and the convent of Arrabida.

The literary and educational institutions of the Portuguese cap. comprise, 1. a royal academy of sciences, founded in 1778, having a good library and museum, and publishing memoirs and scientific works; 2. a patriotic literary society, established in 1822, and sending forth a journal of its proceedings, a society for promoting national industry, and the following establishments, either wholly or in part supported by the government, viz. a school of commerce attended by about 150 pupils, a royal naval academy, a royal academy of engineering, a school of surgery, a music school, twelve schools of logic and rhetoric, twelve others for classical instruction, and eighteen primary schools. The national public library of Lisbon, in the Praça do Commercio, has been much enriched by the addition of books formerly belonging to the monasteries, and now contains about 150,000 printed vols., besides MSS. The library of the Cortes in the *Hospicio real de nossa Senhora das Necessidades*, where that body holds its sittings, comprises about 30,000 vols.; and that belonging

Digitized by Google

to the theological seminary of San Vicente de Fora has about 18,000 vols.; but the books in these collections are chiefly ecclesiastical, while the departments of science, modern literature, and modern history are almost entirely neglected. Besides the establishments already described may be mentioned the royal printing office, and the cabinet of natural history and botanic garden at Ajuda.

The harbour, or road of Lisbon, is one of the finest in the world; and the quays, which extend nearly 2½ m. along the banks, are at once convenient and beautiful. Fort St. Julian, built on a steep projecting rock, marks the N. entrance of the Tagus; and on it is a light-house, rising 120 ft. above the sea level. Two large banks, called the N. and S. Cachops, obstruct the river mouth, and on the middle of the latter stands the Bugio fort and lighthouse, the latter being 66 ft. high. The least depth of water on the bar in the N. channel is 4 fathoms, and in the S. 6 fathoms; and there is little danger in entering the port, except during ebb tides, which run out at the rate of 7 m. an hour. Inside the harbour the water from nearly 20 fathoms in mid-channel shoals gradually to the edge; but in some parts vessels may come within 200 yards of the shore.

The foreign trade of Lisbon, formerly of considerable importance, but perhaps, at all times, much overrated, has rapidly declined since the emancipation of Brazil. She had formerly about 400 ships, varying in burden from 300 to 600 tons, engaged in the South American trade; but at present only 50 vessels are employed in that trade, the average burden of which does not exceed 150 tons. Indeed, the produce of Portugal now sent to foreign countries is almost entirely conveyed to its destination in foreign ships. A small number of sea-going ships belonging to the port are engaged in foreign trade, partly with the E. Indies and China, but chiefly between Setubal (or St. Ubes) and Cork, exporting salt in return for butter, and about 1,000 small craft are employed in the coasting trade. The following table shows the number and tonnage of the vessels of various countries that entered and cleared the port of Lisbon in the year 1862:—

Countries	Entered		Cleared	
	Vessels	Tons	Vessels	Tons
Austria	6	3,809	3	817
Barbary States	28	8,187	6	1,224
Belgium	22	7,513	14	5,347
Brazil	160	79,247	237	102,186
Bremen	2	641	—	—
Denmark	10	1,558	37	8,870
Egypt	7	6,843	—	—
United States	30	8,149	32	10,409
France and Possessions	127	57,727	142	53,795
Greece	2	1,925	—	—
Hamburgh	32	5,200	7	1,036
Spain and Possessions	89	18,112	114	26,805
Holland and Possessions	27	4,215	40	6,082
Great Britain and Poss.	745	210,468	391	159,628
Italy	24	7,623	18	5,192
Portuguese Ports	19	3,789	162	28,565
Portuguese Possessions:				
In Africa	46	16,899	42	15,714
In Asia	7	2,205	5	1,666
Danubian Principalities	7	5,578	1	327
Prussia	3	605	3	722
Russia	23	9,492	30	7,600
Sweden and Norway	56	13,291	112	25,764
Newfoundland	40	6,524	26	4,325
Turkey	7	2,619	4	949
Other Countries	2	846	17	4,606
Total	1,521	478,065	1,443	471,630
Coasting Trade	1,106	101,516	984	104,060

The exports comprise wine, oil, fruit, and salt; among the imports are, hemp, flax, and linen cloths from Russia, iron, steel, salt fish, timber, pitch, and tar from the Baltic; linens and corn from Holland and Germany; silks from France; and cotton and woollen goods, cod-fish, hardware, ale and porter, linen, coals, and earthenware from England, which engrosses fully 7-8ths of the trade in foreign bottoms. The following table gives the value of the imports and of the exports at the port of Lisbon in the year 1862:—

Countries	Imports	Exports
	Milreis	Milreis
Barbary	37,882	2,096
Belgium	316,094	11,416
Austria	14	41,626
Brazil	1,880,716	1,657,204
Buenos Ayres	—	4,392
Denmark	270	10,304
United States	178,000	18,276
France and Possessions	1,607,376	313,978
Hamburg	108,590	52,208
Spain and Possessions	301,628	22,426
Holland	148,275	68,996
Great Britain and Possessions	7,220,990	1,130,900
Italy	110,226	135,675
Portuguese Possessions:—		
In Africa	1,480,496	390,586
In Asia	146,738	35,298
Azores	43,998	771
Russia	129,229	33,883
Prussia	—	510
Sweden and Norway	302,184	22,118
Newfoundland	274,284	7,184
Turkey	—	88
Ships' Supplies	—	40,899
Total (Milreis)	14,287,290	4,000,834
Total (£)	3,214,640	900,187

The port of Lisbon is open to all nations, all articles, except corn and flour, being allowed to be warehoused. All exported articles pay a duty of 4 per cent. *ad valorem*. There is no regular warehousing and bonding system at Lisbon; all imported dry goods are allowed to lie in the custom-house stores 2 years, and liquids 6 months, without charge, provided they are intended for consumption, and pay duty accordingly; otherwise, if re-exported, they pay 2 per cent. The port charges on a foreign ship of 300 tons, entering with a general or mixed cargo, and clearing out with the same, average 56,260 reis, or 11*l.* 6*s.*, nearly 4-5ths of which are tonnage and light dues, the former being 100 reis, and the latter 50 reis, per ton.

Lisbon has some fabrics of silk, paper, and soap; there are sugar refineries, tan-yards, and potteries; and its goldsmiths and jewellers are amongst the most expert in Europe; but in every pursuit is to be perceived a want of energy and industry, to be traced perhaps to the character of the people as well as to political causes.

The climate of Lisbon is variable, but, on the whole, healthy and genial, notwithstanding the cold piercing winds from the sea, which are disagreeable even during the scorching heats of summer, with the thermometer at 96° and 100°: heavy rains prevail in Nov. and Dec., but it seldom snows: cold clear weather is usual in Jan., and spring commences about the middle of Feb.

The pop. of Lisbon is of an extremely varied character: nearly a third of the lower orders are Gallegos, blacks, or mulattoes, who, though the worst used and least considered, have a just claim to rank as the most hardy and industrious people of the cap. Genoese, Spaniards, and a few French, also, are employed, as gardeners or as innkeepers, cooks, and stewards. The lower orders of the

Digitized by Google

Portuguese, who are seen, perhaps, to more disadvantage in Lisbon than in any other part of the kingdom, are remarkable for their indolence and disregard of the comforts of life; these evils are owing, in a great measure, to the total want of education. Garlick, rancid oil, dried fish, and goat-cheese, which constitute their favourite food, are easily procurable; and so unconquerable is the predilection for the *dolce far niente*, occasioned in part, no doubt, by the climate, that they very seldom work, except for a bare subsistence. That contempt of cleanliness, which is more or less evinced by all but the very highest classes, is most striking and revolting in the lower orders, whom a recent traveller has well described as 'a swarthy meagre race, generally clothed in rags, and filthy beyond endurance.' Irascibility and revengefulness are features of character common to all the inhab. of the peninsula; but to these the Portuguese adds cowardice, and hence assassinations and night attacks are far more common than in Spain. Honesty and veracity are virtues seldom met with, unless among the merchants and better class of tradesmen; but there are some exceptions, particularly among domestic servants, who are usually respectful, attentive, and attached to the families by whom they are employed. The merchants are an important body, not inactive in business, and tolerably wealthy, considering the great diminution of their resources since the separation of Brazil from the crown of Portugal; but their habits are modelled on those of foreign countries, or from intercourse with the English and French, many of whom, especially the former, have considerable commercial establishments in Lisbon, and constitute, in fact, its best society. The Portuguese of the aristocratic classes are more grave, reserved, and proud than the Spaniards, against whom all orders of the people entertain a deep-rooted, national antipathy. Their neighbours, however, are not far behind them in the violence of their prejudices, to judge from the Spanish proverb: 'Strip a Spaniard of all his virtues, and you make him a good Portuguese.'

Lisbon, as a place of residence, is somewhat dull, especially compared with Madrid. There are no public walks or lounges, like the Prado and the Puerta de Sol, unless, indeed, the 'Tapada,' a kind of paddock, on the road to Belem, may be reckoned among them. Nor are the evenings rendered less tedious by the nightly tertulia, a pleasing feature in the society of Madrid. Families live much among themselves, seldom seeing company; neither sex is disposed to much exercise; and their chief pleasure is during summer, when they live in the retirement of their beautiful quintas, a great number of which are situated where

> 'Cintra's glorious Eden intervenes
> In variegated maze of mount and glen.'

The dress of the middle and higher classes of men differs little from that in England, except that a cloak or loose great coat is commonly worn over the dress both in winter and summer. The ladies spend absurdly large sums on their wardrobe; but their dress is tawdry and showy. Jewellery and gay-coloured shawls and mantillas are highly fashionable, coloured shoes being worn by walkers even in the filthiest streets of the city; indeed, ostentation and glare are prevailing features in the costume of Lisbon females, which forms a striking but unfavourable contrast with the sombre but luxurious dress of the ladies of Madrid.

The diet of the people of Lisbon differs exceedingly from that of the French or Spaniards. Oil and garlick, the former usually thick and rancid, are unvarying ingredients at breakfast and supper, which are the principal meals. Indian corn and barley often supply the place of wheat; tea is little used, but chocolate is indispensable at breakfast, the accompaniments being hot beef steaks and fish. Rice is the invariable accompaniment of dinner, served up with boiled beef, ham, and fried sausages, all which are eaten promiscuously. The *cuisine*, however, of the higher classes is somewhat better conducted; but want of taste in these matters is universal. Fish is excellent and cheap; and its market, in quality and variety at least, might vie with that of London. Abstemiousness in eating is little practised, even by the tender sex; but temperance in the use of wine is almost universal. Domestic habits are much more common among the middle classes in Lisbon than in Madrid: but both men and women marry at a very early age, and the parties are generally indifferent, often even unknown, to each other, the parents being the only negotiators of these unions, which may justly be called *mariages de convenance*. This accounts for the prevalence of conjugal infidelity, which is quite as common here, though scarcely so obtrusive, as in Spain.

The vicinity of Lisbon, ugly and uninteresting as is the city itself, presents most striking and delightful scenery. Orange and olive trees, cypresses, and judas-trees, grow not only in the gardens, but in the open country. To the E. and N. of Lisbon are numerous quintas or country-houses, with rich plantations and vineyards; and about 6 m. NW. of the cap. is Cintra, a place that holds the same relation to Lisbon as a resort of Sunday visitors, that Richmond does to London. The romantic beauties of Cintra have been celebrated by Byron, in language full of poetic beauty, and admirably descriptive of the scenery:—

> 'The horrid crags, by toppling convent crown'd,
> The cork-trees hoar that clothe the shaggy steep,
> The mountain-moss by scorching skies imbrown'd,
> The sunken glen, whose sunless shrubs must weep,
> The tender azure of the unruffled deep,
> The orange tints that gild the greenest bough,
> The torrents that from cliff to valley leap,
> The vine on high, the willow-branch below,
> Mix'd in one mighty scene, with varied beauty glow.'
> Childe Harold, c. 1.

The valley of Collares, extending W. from Cintra, is one of the best cultivated, as well as richest spots, in the kingdom, and may be termed the nursery-garden of Lisbon, since the markets of that city are chiefly supplied from this quarter with fruit and vegetables: the genuine Carcavella wine is made from a peculiar grape raised in this district. About 8 m. from Cintra is the palace and convent of Mafra, called, though very improperly, the Escurial of Portugal. (See MAFRA.) W. and SW. of Lisbon the country is not so well cultivated, the hills (formed of basalt, covered with limestone) being more rocky and naked, and extending W. several miles beyond Belem. This suburb (for though Belem is 2¼ m. from the Praça do Commercio, it is connected by a nearly continuous line of streets), inhabited by a pop. of about 8,000 persons, chiefly belonging to the nobility and wealthy citizens, may justly be called the west end of Lisbon. The church of San Geronimo has already been mentioned. The tower of Belem, another striking object, is the great customs-station of the port, whence the officers board all vessels entering the Tagus: close to it is a good quay, and without the village are the castle of Ajuda and the *quinta da Rainha*, with gardens and menageries, open to strangers.

Lisbon was anciently called *Olisipo*, a name

Digitized by Google

derived, as some say, from a legend that it was founded by Ulysses. The Romans changed its name to *Felicitas Julia*, giving it the privileges of a *municipium*: the ruins of an ancient theatre near the cathedral warrant the inference that it was then a place of some note. The Moors captured the city in A.D. 716, and, with some slight exceptions, it remained under their power till, in 1145, Alphonso I. made it one of the capitals of Christendom. In the 14th century, Ferdinand I. surrounded the city with walls; but it attained no great importance till the reign of Emanuel the Great (1495–1521), who made it the principal port of the kingdom at a time when the Portuguese were distinguishing themselves above the other nations of Europe in maritime discovery, and wealth was fast pouring in from the recently explored regions of the East. Its subsequent history is intimately connected with that of Portugal. One of the most extraordinary events that happened to the city was the earthquake of 1755, by far the most tremendous, and most extensively felt, that has occurred in modern times. On the first of November, in the above year (a festival-day, on which all the churches were lighted up, and crowded with devotees), a sound like that of thunder was heard under ground, and immediately afterwards a violent shock threw down the greater part of the city, destroying about 60,000 human beings in six minutes. The sea first retired and laid the bar dry; it then rolled in, rising 50 feet, or more, above its ordinary level. The neighbouring mountains, among the highest in Portugal, were impetuously shaken, and some of them opened at their summits, which were split and rent, huge masses of rock being thrown down into the subjacent valleys. But the most extraordinary circumstance was the subsidence of an extensive marble quay, on which great crowds had collected for safety. It suddenly sank with all the people on it, and not one of their bodies ever floated to the surface; nor were those in boats and vessels, on the Tagus, much more fortunate, great numbers being destroyed in the whirlpool occasioned by this catastrophe. This earthquake destroyed also the sea-port of Setubal, and a village about 20 m. from Morocco, with nearly all their inhab.; violent shocks being, at the same time, felt all over W. Europe, in N. Africa, and even in the W. Indies and S. America. (Lyell's Geology, ii. 239.) From this disaster, Lisbon has never entirely recovered. The celebrated Marquis de Pombal, the chief minister of Portugal at the time, exerted himself to have it rebuilt on a regular plan, and to him it owes the few good streets in the neighbourhood of Rocio, the rest of the city presenting either ancient and crazy buildings crowded together in the greatest disorder, or heaps of ruins and rubbish allowed to lie where they fell more than a century ago, monuments at once of the indolence of the Portuguese, and of a calamity which all but annihilated one of the capitals of Europe. In 1807, the French army, under Junot, occupied Lisbon for a short time after their defeat at Vimiera; but they were soon driven from it by the combined Anglo-Portuguese army. Lord Wellington, in the same year, fortified the famous lines of Torres Vedras, which, in 1809, proved a sufficient defence against a fresh invasion of the French under Massena.

LISBURN, an inland town and parl. bor. of Ireland, co. Antrim, prov. Ulster, on the Lagan, and on the railway from Belfast to Dublin, 8 m. SSW. the former, and 80 m. N. by E. the latter. Pop. 7,484 in 1861, against 7,524 in 1841. Lisburn is one of the handsomest, best built, and cleanest towns in the N. of Ireland. It consists principally of a main street along the old high road from Belfast to Dublin. Its church has been constituted the cathedral of the united dioceses of Down and Connor. It has also a R. Cath. chapel, a Presbyterian, 2 Methodist, and 1 Quaker meeting-house; a national school, 2 infant schools, and a school for the education of Quaker children, supported by the voluntary subscriptions of its members, several almshouses, the infirmary for the co., a market-house, which contains a suite of assembly rooms, and a court-house, formerly a place of worship for the Huguenot settlers. The Lagan river, on which the town is situated, runs into the head of Belfast Lough, and divides the co. of Antrim from that of Down: it also separates a small suburb from Lisburn, no part of which is in the bor., though in the same par. Great improvements have been effected within the last forty years in Lisburn by the Marquis of Hertford, who is the owner of the fee of the old town, and of a considerable part of the surrounding country. A canal runs from Lough Neagh into the river Lagan near the town, by which agricultural produce is conveyed to Belfast. Damask of the most beautiful description is manufactured in the town, as well as muslin and linen, though the two latter branches have fallen off considerably. There are also extensive vitriol works on an island formed by the canal and river.

Under a patent from Charles II., Lisburn sent 2 mems. to the Irish H. of C. The franchise was originally vested in the potwallopers; but was restricted by the 35 Geo. III. cap. 29, to the 5*l.* householders. Since the Union it has sent 1 mem. to the Imperial H. of C. Registered electors, 314 in 1865.

Lisburn, which was long an obscure place, owed its first rise to the erection of a castle by Lord Conway, about 1627. It repulsed the Irish forces under Sir Phelim O'Neil with great slaughter, at the breaking out of the rebellion of 1641, and in 1644 baffled a similar attempt by General Monroe, who, a few years afterwards, was defeated near the town by the parliamentary forces. Shortly after the Revolution, a body of Huguenots, who emigrated from France on the revocation of the edict of Nantes, settled here, and introduced the finer branches of the linen manufacture, to which the town is mainly indebted for its prosperity. The castle, which was burnt down with a part of the town in 1707, has never been rebuilt.

LISIEUX (an. *Lexovium*), a town of France, dép. Calvados, cap. arrond. on the Toucques, 27 m. E. by S. Caen, on the railway from Paris to Caen. Pop. 13,121 in 1861. The town has but one good street, which forms part of the road between Caen and Evreux; all the others are narrow and crooked, and the houses built of wood, and antiquated. It is, however, very well situated, and has environs of much beauty. Its cathedral, a Gothic edifice of the 12th century, has attached to it a fine chapel, dedicated to the Virgin, of a later date than the rest of the building. The bishop's palace, surrounded by noble gardens, the hospital, and the theatre, are all good buildings. Lisieux is the seat of courts of primary jurisdiction and commerce, and of a communal college, and has manufactures of woollen and cotton cloth, flannel, cotton and linen yarn, leather and brandy, and many bleaching factories and dyeing-houses. It was formerly a fortress of some consequence, and was frequently besieged and captured during the middle ages.

LISKEARD, or LESKARET, a parl. and mun. bor., market town, and par. of England, co. Cornwall, hund. West, 11 m. E. Bodmin, 205 m. W. by S. London, by road, and 242 m. by Great

Digitized by Google

Western and Cornwall railway. Pop. of munic. bor. 4,689, and of parl. bor. 6,585 in 1861. Area of par., which is very nearly co-extensive with the parl. bor., 7,740 acres. The town, which is meanly built with narrow streets, appears still more irregular in consequence of its site, partly in a hollow and partly on rocky heights, the foundations of some of the houses being on a level with the chimneys of others. Of late years, however, it has been considerably improved by the erection of large and handsome modern houses in the immediate environs. The town-hall, built at the beginning of the 18th century, is a large and elegant building supported by granite pillars, in the Italian style. The church is a spacious Gothic structure, with a tower of more recent erection. An ancient free grammar school has been allowed, with other charities, to go to decay; but a national school for both sexes, and a school of industry for girls, are efficiently conducted and well attended.

Liskeard, once a town of some consequence in the duchy as the principal place for the coining and stamping of tin, has at present neither manufactures nor commerce, but it is the market of an extensive agricultural district. It has some trade in the metals of the adjacent mining districts, and there are likewise tanneries and ropewalks. Markets on Saturday; fairs, Shrove Monday, Monday before Palm Sunday, Holy Thursday, Aug. 15, Oct. 2, and the Monday after Dec. 6, for horses, cattle, sheep, and corn.

Liskeard (an. *Lis-kerrut*, meaning a fortified post) received its charter of incorporation in 1240, from Richard earl of Cornwall, which was subsequently confirmed by several sovereigns, and among others by Queen Elizabeth. According to the Municipal Reform Act, it is governed by a mayor, 3 other aldermen, and 12 councillors; it has a commission of the peace under a recorder. Corp. revenue, 700*l.* in 1862. From the reign of Edward III. down to the passing of the Reform Act this bor. enjoyed the privilege of sending 2 mems. to the H. of C., who, for many years previously, though formerly elected by the freemen, were, in fact, nominees of the Earl of St. Germains. The Reform Act deprived Liskeard of *one* of its mems., and at the same time enlarged the bor. so as to comprise the entire par. with such parts of the old bor. as are without the par. Reg. electors, 429 in 1865.

L'ISLE, or L'ILE, a town of France, dép. Vaucluse, cap. cant., on an island in the Sorgues, a tributary of the Rhone, 12 m. E. by S. Avignon. Pop. 6,517 in 1861. The town manufactures woollen fabrics and yarn, tram and organzine silk, and leather, and has some trade in silk, madder, oil, and wine.

LISMORE, an inland town of Ireland, cos. Waterford and Cork, on the Blackwater, 28 m. ENE. Cork. Pop. 2,089 in 1861, against 3,007 in 1841. The town has been much improved of late years, principally through the exertions, and at the expense, of the Devonshire family, who have large possessions in this part of Ireland. It stands on an eminence overlooking the river, across which is a bridge, built at the expense of the Duke of Devonshire. Lisburn was formerly the seat of a bishopric, now united with Cashel and Waterford. The cathedral is in good preservation, and handsomely fitted up: it has also a large R. Cath. chapel, a Presbyterian and a Methodist meeting-house, an excellent grammar-school, built and endowed by the Devonshire family, some almshouses, a court-house, a fever hospital, and a dispensary. But the great attraction of Lismore is its magnificent old castle, founded by King John, in 1195. It is nobly situated on a rock rising perpendicularly from the river. This large and venerable pile was once the property of Sir Walter Raleigh; and, after numerous vicissitudes, came, through the Boyles, into the possession of the Devonshire family, by whom it has been greatly improved and embellished. It is now in complete repair, and is occasionally visited by its noble owner. It has withstood several sieges. In 1785, the Duke of Rutland, then lord lieutenant of Ireland, held a court here, and issued some proclamations, dated from the castle.

Lismore returned 2 mems. to the Irish H. of C. till the Union, when it was disfranchised. A manor court holds pleas to the extent of 10*l.* every third week. Petty sessions are held on alternate Wednesdays. It is a constabulary station. The trade of the town is inconsiderable, though a canal has been constructed, by the Duke of Devonshire, from it to near Cappoquin, where the river becomes navigable. There is a salmon fishery close to the town, the produce of which is mostly sent to London.

LISSA (Polish *Leszno*), a town of Prussia, prov. Posen, circ. Fraustadt, near the border of Silesia, 12 m. ENE. Fraustadt, on the railway from Posen to Breslau. Pop. 10,192 in 1861, excl. of garrison of 960. The town is walled, and has three Lutheran churches, a Rom. Cath. church, a synagogue and Jewish school, a gymnasium, two hospitals, a fine council-house, and a theatre. Its streets are mostly narrow and dirty, and the greater number of the houses are of wood. The neighbouring castle was formerly the property of the Leczinsky family, of which Stanislaus, the last king of Poland, was a member; but it is now the residence of the princes Sulkowski, to whom the town belongs. Lissa is the seat of a police court, and a board of taxation: a considerable manufacture of woollen cloth is carried on in it and its neighbourhood; and, besides woollen stuffs, it trades in furs, wines, and hardware. Lissa was an unimportant village, when a number of Protestants, driven from Silesia, Bohemia, and Moravia, by the persecutions of the 17th century, settled in it; and to these immigrants it owes its present consequence.

LISSA. See LESINA.

LITHUANIA, a country comprising a considerable portion of the ancient kingdom of Poland, at present parcelled amongst the Russian governments of Wilna, Grodno, and Minsk.

LIVADIA (an. *Lebadea*, or *Lebadeia*), a city of Greece, which, under the Turks, gave its name to the prov. comprising E and W. Hellas, in Bœotia, on the Hercyna, about 6 m. W. the Lake Copais, 25 m. WNW. Thebes, and 50 m. NW. Athens. Pop. 9,755 in 1861. The streets of the city are narrow and inconvenient. Its site is very striking, occupying several fantastic knolls and crags at the entrance of a deep defile in a branch of the Heliconian chain. The river Hercyna, which rises in a full stream and with great force from beneath a rock close to the town, rolls in foaming torrents over masses of rock: it is augmented near its source by a tributary stream from the cavern of Trophonius. The ancient city, called Mideia by Homer, is supposed to have been built, in part at least, upon the lofty heights which overhang the modern town, and upon which the remnants of a citadel are still visible; with additional buildings constructed by the Catalans, when they were in possession of this country.

Previously to the revolution, Livadia was the seat of a voivode or governor, and a cadi, and had 6 mosques, and as many Greek churches. It had also a considerable trade in the produce of the surrounding territory, and of Attica, with Constantinople, and foreign countries. Madder, corn, oil,

Digitized by Google

kermes, cotton, and honey were among its principal exports, which it formerly sent to Trieste, Venice, Leghorn, Genoa, and even London. Its port at Aspropiti, the an. *Anticyra*, on the Corinthian Gulf, is 18 m. WSW. from the town. Livadia was burned by the Turks in 1821, and subsequently in part destroyed by the Greeks in an attack upon the Turkish garrison. Since the revolution it has recovered some portion of its former trade and prosperity. Its greatest drawback is the unhealthiness of its situation. It suffers from great extremes of temperature; the air is frequently loaded with dense fogs, and in summer is vitiated by pestilential effluvia from the neighbouring lake of Copais. In 1785-86, the plague carried off 6,000 of the inhab. (Clarke's Travels, vii. 146–170.)

The celebrity of Livadia was owing to its being the seat of the famous oracle or cavern of Trophonius. Dr. Clarke has sufficiently identified the site of this celebrated cavern; but the reasons he has alleged in favour of the hypothesis, that the Hercyna is identical with the fountain of *Lethe*, or waters of oblivion, are far from conclusive. (Clarke, vii. 161, 8vo. ed.) Clarke supposes the fountain that now issues from below the cavern to be that which anciently received the name of *Mnemosyne*, or waters of memory; but this fountain may formerly have been divided into two, or one of the ancient fountains may have disappeared through some convulsion of nature: at all events, it would seem to be clear from the statement of Pausanias, that there were within the sacred precinct the two fountains of Lethe and Mnemosyne, exclusive of the source of the Hercyna. (Pausanias, lib. ix. cap. 39.)

This was one of the most formidable of the Greek oracles. The *Hieron*, or sacred cavern, was surrounded by bare, rugged, and high precipitous rocks. Thither those anxious to consult the oracle were, after long preparation, conducted at night through a grove; and could not fail to be deeply impressed by the solemnity of the place, and by the roaring of the waters of the Hercyna bursting forth from their subterranean caverns. Having arrived at the *Hieron*, the votary, after addressing a prayer to the statue of Trophonius by Daedalus, descended into the *adytum*, a narrow and deep aperture excavated in the rock, and, no doubt, leading to some great natural cave or chasm. Those who ventured down into this hidden recess seem, generally, to have experienced rather rough treatment. Trophonius was not to be questioned with impunity. The votaries, when they came forth from the abyss, were usually much exhausted, and had no distinct recollection of what they either heard or saw. Generally, however, the mysteries of this dread cavern made a deep impression on their minds, and entailed upon them a settled melancholy for the remainder of their lives; so that it was a proverbial expression in Greece to say of a gloomy or melancholy individual, that 'he had come from the cave of Trophonius.' No doubt, however, the priests took care to modify their treatment of the votaries, as well as their responses, according to their rank and their bounty to the temple. Pausanias, who descended into the adytum, and describes what occurred to himself, states that when he came out he was so confused as to have lost his senses. But this visit must have taken place so late as the middle of the 2nd century, after the oracle had been long on the decline; and when, probably, it had been stripped of half the horrors by which it had formerly struck terror into those who attempted to penetrate by its means through the veil that conceals futurity from mortal eyes.

The accounts of Trophonius, the reputed founder of the oracle, vary extremely. This much, however, seems to be agreed upon,—that he was a mortal to whom, after his death, divine honours were paid; and that he was supposed to be endowed, like Apollo, with the power of foreseeing and predicting future events. It is probable that the gloomy grandeur of the place, and the discovery of some hidden cavern, where all sorts of impostures might be easily practised, first suggested the idea of making it the seat of an oracle; and there seems little doubt that it was indebted to the same circumstances for its celebrity and its votaries. According to Dr. Clarke the present town of Livadia occupies that part of the consecrated ground formerly covered by the grove of Trophonius; but this is merely a conjecture. Pausanias says that Lebadéa was as much ornamented by temples, statues, and other splendid works of art as any city of Greece. A statue of Trophonius by Praxiteles was deservedly reckoned among its principal treasures. (Pausanias, lib. ix. cap. 39; Voyage d'Anacharsis, cap. 34; Potter's Grecian Antiquities, book ii. cap. 10.)

LIVERPOOL, a parl. and mun. bor. and seaport of England, being, next to London, the most populous town of the British empire, in the co. Lancaster, hund. W. Derby, on the E. or right bank of the Mersey, 32 m. W. by S. Manchester, 67 m. WSW. Leeds, 196 m. NNW. London by road, and 202 m. by London and North Western railway. Pop. of bor. 443,938 in 1861. The bor. includes the townships of Liverpool, Kirkdale, Everton, West Derby, and Foxteth Park. Its total population was 375,955 in 1851, and 82,857 in 1801. The progressive increase of population from 1801 to 1841 was as follows:—

Townships	1801	1811	1821	1831	1841
Liverpool . .	77,653	93,376	118,972	165,175	223,003
Kirkdale . .	..	..	..	2,591	4,268
Everton . .	499	913	2,109	4,518	9,221
W. Derby . .	2,636	3,692	6,294	9,613	9,760
Toxteth Park .	2,069	5,864	12,829	24,067	40,235
Total Parl. Bor.	82,857	103,851	140,214	205,964	286,487

It will be seen that Liverpool doubled its population nearly every twenty years since the beginning of the century.

Liverpool stands partly on flat ground, along the edge of the river, and partly and principally on a gently rising declivity. Besides quintupling its population during the last sixty years, it has been more improved during that period than any other town in England, not excepting Manchester. Before that time narrow, inconvenient, and ill-paved streets, lined with dull, heavy-looking houses, were its characteristic features; but so great is the alteration effected chiefly through the exertions of the corporation and the public spirit of the citizens, that at present no town or city in the three kingdoms, except their capitals, has wider or handsomer streets, more sumptuous public buildings, or better constructed and more substantial private dwellings. The present limits of the town comprise about 2-3rds of the parl. bor.: its length from N. to S. is about 3 m., its breadth from the river to Edgehill, 2 m., and its area somewhat exceeds 3,000 acres. The central point, from which many of the principal avenues diverge, is the open space partly occupied by St. John's church, and the railway station: the diverging roads are,—1, Dale Street, a fine broad avenue running SW. to the Town-hall and Exchange Buildings, and continued, under the name of

Digitized by Google

Water Street, to George's Dock; 2, Whitechapel and Paradise Street, leading to the Custom House; 3, Lime Street, Renshaw Street, Berry Street, and Great George Street, running nearly S. towards Toxteth Park; 4, the London Road, taking an E. direction towards the Zoological Gardens; and, lastly, Byrom Street and Scotland Road, leading to the House of Correction in Kirkdale. The principal streets, independent of those above mentioned, are Castle Street, opposite the Town-hall, Lord Street, Church Street, Hanover Street, Bold Street, Rodney Street, Mount Pleasant, St. Anne's Street, and the Vauxhall Road; and among the principal squares may be mentioned Great George's, Queen's, Abercrombie, Falkney, Clayton, and Cleveland. Liverpool was formerly supplied with water from wells sunk in the red sandstone in various parts of the town, belonging to two companies; but the supply being deficient for the growing wants of the pop., the corporation bought up the rights and property of the companies, in 1848, for 554,807*l.*; and obtained an act of Parliament authorising them to bring an additional supply of water from Rivington Pike, 26 m. distant. The new waterworks, constructed at a cost of 700,000*l.*, and containing a reservoir of 500 acres, with three thousand millions of gallons, were opened in 1856.

Corporation and Government Buildings. — The town-hall, which stands at the N. end of Castle Street, was commenced in 1749: its interior having been destroyed by fire in 1795, it has been since rebuilt at a cost of above 110,000*l.* It has a rustic basement, supporting a range of Corinthian columns and pilasters; in the S. front is a handsome portico, and the building is surmounted by a light and elegant cupola, above which is a colossal figure of Britannia. The interior comprises, besides a handsome suite of apartments for the mayor, a ball-room, 90 feet in length by 40 feet in breadth and height; a council-room, committee rooms, town-clerk's, treasurer's, and surveyor's offices: the grand staircase, under the cupola, is a magnificent specimen of modern architecture: on the landing is a colossal statue of Canning.

The Exchange Buildings, which form three sides of the square in which the town-hall stands, were completed in 1809, at a cost of 110,848*l.*, raised by 100*l.* shares. The principal front is 197 ft. in length; and the area, enclosed by the entire building, somewhat above 11,000 sq. yards: in the N. and S. fronts are two magnificent porticos, each supported by 8 Corinthian columns, and surmounted by a carved entablature with stone figures: a very handsome balustrade runs round the entire building. Piazzas extend round the basement for the convenience of the merchants in hot and rainy weather. In the interior is a magnificent news-room, originally 94 but now 125 ft. in length, by 51 ft. 9 in. in width, having an arched roof supported by two rows of columns; above this is a splendid room for the underwriters, while, in other parts of the building, are numerous counting-houses, and offices, and warehouses. The Exchange is held to be one of the best specimens of Grecian architecture in England, and the noblest structure erected in modern times for purely commercial purposes. In the centre of the square is a monument of Nelson, executed in bronze, on a marble basement: it represents the dying hero receiving a naval crown from Victory. W. of the exchange stands the session-house, a low, plain, stone building with two principal entrances; in the interior are two spacious rooms, used as nisi prius and crown courts, with other apartments for the use of the judges, magistrates, and jurors; the whole was built, in 1828, at a cost of 19,312*l.*, exclusive of subsequent alterations occasioned by the removal of the assizes of the W. Derby and Salford hund. from Lancaster.

The custom-house, excise-office, post-office, and other public offices are comprised in the immense pile of building erected at the South end of Castle Street, on the site of the old dock, which was filled up for the purpose. It covers an area of 6,700 square yards, has an extreme length of 467 ft. measured from E. to W., with a total height of 67 ft., the length of its wings being 225 ft., and their breadth 94 ft., and is remarkable not merely for its size, but also for its massiveness. Porticoes, supported by Ionic columns, are attached to the centre, and to the E. and W. fronts; and it has a large dome, lighted by 16 windows, and embellished with pilasters. The basement, through which there is a public passage connecting Castle Street with Park Lane, is used for storing bonded goods. The central portion is occupied by the great staircases and the long room, 146 ft. in length, 70 ft. wide, and 45 ft. high, lighted from the dome; the W. or river wing contains the various offices of the custom-house; and the E. wing contains the excise-office, dock-offices, post-office, and stamp-office. This useful, though heavy-looking, building was erected in consequence of an arrangement between the corporation and the government, negotiated by Messrs. Canning and Huskisson. The corporation gave the land, valued at 90,000*l.*, and erected the building, on condition of its being ceded to government for the sum of 150,000*l.*, by annual instalments of 25,000*l.*, commencing 20 years after the completion of the building. The most magnificent edifice in Liverpool is that for the assize courts, inc. St. George's Hall, in Lime Street, opposite to the railway station. It is of the Corinthian order, the eastern front being 420 ft. in length, and the columns 45 ft. in height. St. George's Hall, in the centre of the building, with a spacious court on each side, is a noble apartment 175 ft. in length by 75 ft. in width, and 75 ft. in height. St. George's Hall has a statue of George Stephenson, by Gibson. When the courts are not sitting, it is appropriated to public meetings, concerts, and other entertainments. This building cost in all about 192,000*l.* The hall in Hope Street, built by the Philharmonic Society, is also of very large dimensions, and is well suited to its object.

Literary Establishments and Places of Recreation.—Though extensively busied in trade and commerce, the merchants of Liverpool are honourably distinguished by their attention to, and patronage of, science and literature; and the town has several valuable institutions for their promotion. The Royal Institution in Colquitt Street, formed in 1814 at the suggestion of the late Mr. Roscoe, by the subscription of 100*l.* shares, and chartered in 1822, comprises academical schools, public lectures on various subjects, laboratories and philosophical apparatus, a collection of books, and a museum. The lecture room is capable of accommodating 500 persons, and the natural history department of the museum, occupying two floors of the building, is perhaps the largest and most valuable in the kingdom, after the British Museum, and that of the Zoological Society of London. The institution has also a fine collection of casts from the Elgin, Æginetan, and Phigalian marbles, and from some of the most celebrated statues of antiquity. The collegiate institution in Shaw Street, a fine building in the Tudor style, opened in 1842, cost about 30,000*l.* Its principal

Digitized by Google

front is 280 ft. in length. It has accommodation in separate schools and classes for 1,500 pupils; and is conducted according to the principles of the Church of England, the bishop of Chester being the visitor. Another educational institution, said to be admirably managed, but of a scope different from that of the Collegiate Institution, is Queen's College, founded in 1857. A truly noble establishment, worthy of the town and its spirited inhabitants, is the public museum and library, founded by W. Brown, esq., subsequently Sir William Brown, bart. The edifice, which stands on Shaw's Brow, is in the classical style, and was built in the years 1858–60. It is 220 ft. long, and its total cost exceeded 40,000*l.* The mechanics' institute in Mount Street, near St. James's cemetery, intended not only to meet the wants of the working classes, but also to bring them in contact with those in higher spheres of life, was opened in 1837. Its buildings, which cover nearly an acre of land, given by the corporation, were erected at a cost of above 15,000*l.* The grand theatre is capable of accommodating 1,200 persons: it has a museum and a library, with 15,000 vols. It has attached to it schools meeting at different hours, and intended, like those in the collegiate institution, to accommodate various classes of the population.

The Medical Institution in Mount Pleasant, built at a cost of about 2,000*l.* (½ of which, with the land, was contributed by the corporation, and the rest by the medical practitioners of the town), has a circular-shaped front, of the Ionic order, 108 ft. in length, and 35 ft. in height; and in the interior are various large apartments, used as libraries, museums, and lecture-rooms. Apothecaries' hall, belonging to a joint-stock company, may be mentioned here, not as a place of medical instruction, but as conferring important benefits on the profession and the public by importing and manufacturing medicines of the best quality: the building is handsome, and all the arrangements most complete. The school of medicine formerly attached to the Royal Institution has been removed to the infirmary.

Closely connected with the above institutions are the news-rooms, among which the Athenæum holds the highest station. The building, opened in 1799, is large, but plain; 500 proprietors subscribe to form a yearly income of 1,320*l.*; the library comprises 17,500 volumes; and the news-room is spacious, and well provided with the publications of the day. The Lyceum, a much handsomer building, erected at an expense of above 11,000*l.*, supported by about 800 proprietors, paying guinea subscriptions, has a library of about 35,000 volumes, in an elegant circular room lighted from a cupola. The Union news-room in Duke Street is also a respectable building; and there is an important news-room, already noticed, in the Exchange.

Liverpool has four theatres—the Theatre Royal, the Adelphi Theatre, the Amphitheatre, and the Prince of Wales's Theatre. The Theatre Royal, in Williamson Square, built in 1817, has a plain exterior, but the interior is comfortably fitted up and is well suited for hearing. The Amphitheatre, in Great Charlotte Street, is used mainly for equestrian exercises, but is frequently occupied with public meetings. The people of Liverpool, like those of the metropolis, seem to have little taste for theatrical exhibitions. Of the new kind of places of amusement, called music-halls, Liverpool has several, the oldest known as Cunningham's, established in 1849. There is a race-course at Aintree, about 5 m. distant from the town; one at Hoylake, distant 9 m.; and a third on the Rood-eye at Chester. From the facilities afforded by railway communication, Aintree and Chester are practically the race-courses of Liverpool.

The Zoological Gardens, on the eastern verge of the borough, occupy an area of about 10 acres, and the collection is regarded as extremely good. In the summer season, other attractions are added for visitors and subscribers, including fireworks, feats of strength, skill, and agility. The grounds are well laid out, and the disposition of the buildings is well suited to the disposition of the animals. The Botanic Garden, formerly on the borders of the parish, has been removed beyond Edge Hill. It was formerly the property of shareholders, but now belongs to the town, and is supported by a rate. It is constantly open, and is an agreeable outlet, especially for those in its neighbourhood. Within the borough, and bounded by its southern limit, the beautiful enclosure, called Prince's Park, has been purchased and laid out by Richard Vaughan Yates, esq., at a cost of about 40,000*l.* It occupies about 45 acres, and is open to the public. The Prince's Parade, between Prince's Dock and the river, St. James's Cemetery, and St. James's Mount, on one side of the cemetery, are public promenades, which are kept in good order.

Markets.—The markets of Liverpool are better supplied, perhaps, than those of any other town in the empire. Ireland and Scotland, particularly the former, furnish grain, live stock, bacon, and butter; and the Isle of Man, Anglesea, North Wales, and Cheshire send excellent poultry and eggs, with butter and other farm produce; neither can any town in England, the metropolis not excepted, boast of market accommodation equal to Liverpool. The largest market building is St. John's, completed in 1822, at a cost of 36,813*l.*, covering a space of nearly two acres, being 183 yards in length, by 46 in breadth. It is a light and lofty structure, having its roof supported by 116 cast-iron pillars; the walls are lined with 58 shops, and upwards of 400 stalls and standings run in four ranges up and down the interior. It is brilliantly lighted with gas; and, on the whole, the regulations are so good, that it may be said to be unrivalled both for size and convenience. St. James's Market, at the end of Great George Street though only half the size of that last mentioned, is still a large and well-constructed building, regulated by the corporation; as is St. Martin's Market in Scotland Road. There are eleven other markets. The total expenditure by the corporation for these buildings has amounted to about 400,000*l.* The corn exchange in Brunswick Street, erected by a subscription of 10,000*l.* in 100*l.* shares, has a plain but handsome front. It was erected in 1807; but, owing to the increase of business, it had to be enlarged not very long ago. The principal other markets are the Pedlers' Market, for small wares, and the fish hall and fish market; both the latter, as indicated by the name, devoted to the sale of fish, the consumption of which is very great in Liverpool.

Churches, Chapels, and Schools. — Liverpool, which, till 1699, was a chapelry attached to Walton-on-the-Hill, was constituted by act 10 & 11 Will. III. c. 36, a distinct parish divided into 2 medieties, the parish churches being St. Nicholas and St. Peter's. With the enormous increase of population, however, a great many other churches had to be opened. Of these, some were built by the corporation, who, though they have sold the patronage, are bound to keep the churches in repair, and to pay certain salaries to the incumbents.

Digitized by Google

Other churches were built by associations, and others by private parties. The census of 1861 gave the population of the eighteen ecclesiastical districts as follows:—

Ecclesiastical Districts	Population
All Saints	9,204
St. Aidan	12,718
St. Anne	10,330
St. Barnabas	7,544
St. Bartholomew	8,777
St. Bridget	3,954
St. Catherine	9,679
St. David	7,442
St. George	4,002
St. John	5,561
St. Mark	10,066
St. Martin	26,961
St. Michael	8,819
St. Paul	7,637
St. Saviour	4,615
St. Silas	7,019
St. Simon	5,716
St. Thomas	4,984

The most remarkable churches of Liverpool are St. Nicholas, rebuilt 1774; St. Luke's, a handsome modern church, by Foster; and St. George's, which stands on the site of the old castle. The rectory is worth 2000*l.* a year. The emoluments of the established clergy in Liverpool, as in most large English towns, are mainly dependent upon the voluntary principle, or arise chiefly from pew rents. Some of the new churches are endowed with 150*l.* per annum, in consideration of the body of the church being appropriated to the use of the poor. In a few other churches there are endowments from Queen Anne's Bounty, or other ecclesiastical funds, or from the interest of sums subscribed for the purpose; but in many, perhaps the majority, of cases, there is no endowment whatever. The clerical incomes are, therefore, extremely fluctuating. In the lower and central parts of the town, there has latterly been a steady decrease in the amount of pew rents, as the higher classes remove further out of town, and their successors sometimes cannot, and sometimes will not, pay. The range of payments is from 100*l.* to 600*l.* per annum, perhaps not more than two reaching either this maximum or minimum limit, if so many. The average may be stated at the mean between these, or 350*l.*

The dissenters in Liverpool are highly important and respectable, whether considered in respect of station, numbers, or character. The first Presbyterian congregation was established in 1672, and a second about thirty years afterwards: the Baptists settled themselves here in 1714, and the Independents in 1777. The first Wesleyan Methodist chapel was opened in Mount Pleasant in 1791; and the New Connexion Methodists (or Kilhamites) built a chapel in 1798. Many of these places of worship are large and commodious, and a few exhibit much exterior elegance. Among the most notable of these are the two Roman Catholic churches of the Holy Cross and of St. Vincent de Paul. The first named, by Pugin, is 102 feet long, in a decorated Gothic style; the second is 150 feet long. The number of Roman Catholics in Liverpool is constantly on the increase, owing to the continued immigration of Irish labourers.

Among the endowed schools, the principal are the corporation schools, formed in 1825, on the foundation of an old grammar-school, that had been extinct since 1803: they are conducted on the national system, and infant schools are attached to each, so that, in all, above 1,000 children are taught in them. The N. and S. Church of England schools instruct 485 boys, 350 girls, and 453 infants. The Bluecoat Hospital, instituted in 1709, provides clothing, food, diet, and instruction for 250 boys and 100 girls. The building, which is of brick, has a handsome appearance, and the instruction, on the Madras system, is said to be as perfect as that of any school in England conducted on the same plan. The school of industry, established in 1810, is intended for training girls for domestic service. The number is limited to 100, and a few of the more deserving scholars have board and lodging, as well as a good plain education. Christ-church National schools educate 250 boys, 260 girls, and 200 infants; and Everton National school has 66 boys and 60 girls. Among the other schools may be specified Waterworth's school, in Hunter Street; St. Patrick's charity-school; the Duncan Street schools, supported by the Society of Friends; the Renshaw Street school, maintained by the Unitarians; and the Caledonian school in Oldham Street. There is likewise a blind school, and a school for the deaf and dumb.

Charitable Institutions.—Liverpool has many extensive and respectable edifices devoted to charitable purposes, among which may be mentioned the Charitable Institution-house in Slater Street, intended to give gratuitous accommodation to all religious and charitable institutions established in Liverpool, for committees, public meetings, and lectures. The infirmary in Brownlow Street (removed from Shaw's Brow in 1824) was erected at a cost of 27,800*l.*: it is a chaste and elegant structure, with an extent of masonry, and a number of front windows, that give it, when seen from the street, an appearance of grandeur exceeded by few other buildings in the town. There are 20 wards, comprising excellent accommodation for 234 patients, and the medical staff attached to the institution equals in ability and attention that of any hospital out of the metropolis. The fever hospital, with 110 beds, supported by the poor-rate, is a valuable institution. The lunatic asylum, erected not many years ago, at a cost of 11,000*l.*, to supply the place of an older establishment, has a handsome exterior, and comprises accommodation, with spacious airing-grounds for 60 patients, many of whom, as at York, belong to the higher classes. The Lock Hospital, connected with the infirmary, was opened in 1834, with accommodation for 60 patients. The Northern and Southern hospitals are extensive buildings. Three dispensaries (one of which, in Vauxhall Road, is a large and elegant building, comprising accommodation for in-patients and medical students) furnish gratuitous advice and medicine for the sick poor, who are likewise attended by the resident officers at their own habitations. There is also an ophthalmic infirmary and dispensary, with which is connected an institution for diseases of the ear. The ladies' charity affords relief to about 1,200 lying-in women every year, with supplies of linen and medicines.

The other principal charities are the Strangers' Friend Society, relieving about 1,000 persons yearly, with a similar institution called the Charitable Society, the Penitentiary and Refuge for the Destitute, both intended for the reformation of degraded females, the Marine Humane Society, and the District Provident Society. The Sailors' Home, a large handsome building near the custom-house, comprises a savings' bank for seamen, and a reading-room, with lodgings for a considerable number of men, and lists of those lodging-houses in the town where they will be best accommodated. The plan seems to be successful in improving the

Digitized by Google

habits, as well as in adding to the comforts, of the seamen frequenting the port. There is also a deaf and dumb institution, and two asylums for the blind, one of which is supported by the Roman Catholics. There are likewise many religious societies, the chief of which are the Bible Society (by far the largest in point of income), the Society for Promoting Christian Knowledge, and the Mariners' Church Society.

Port and Docks.—The rapid rise of the port of Liverpool to its present consequence, though, no doubt, principally due, like that of the town itself, to the astonishing increase of manufactures and population in the extensive district of which it is the grand emporium, is also, in part, owing to the facilities which have been given to navigation and commerce by the construction of wet and dry docks. The estuary of the Mersey may be properly termed an arm of the sea, opening to this port a ready access to the Western sea; and ships of any burden may come up fully laden to the town, though the sand-banks which enclose the channels are continually shifting. The main entrance to the estuary of the Mersey is crossed by a bar, which however has, at low water spring tides, 11 ft. water; and as the tides rise 21 ft. at neap and 31 ft. at spring tides, there is water for the largest ships. The channels being indicated by light vessels, and well marked with buoys, there is no difficulty in making the port.

The land around being low, the ships in the river are exposed to risk from gales of wind; and to obviate this inconvenience, and to facilitate their loading and unloading, a number of gigantic docks have been constructed which constitute the great glory of the town. The first wet dock in the British empire was opened here in 1718, the act for its formation, the 8 Anne, c. 12, having been passed in 1709. Another act was passed in 1738, the 11 Geo. II. c. 32, authorising the construction of a second dock. Since that period many more docks have been constructed on a very extensive scale, so that the aggregate area of those now in use amounts to nearly 300 acres, and the quay-space to about 17 m. in length. The total cost of the existing docks amounts to above 13,000,000*l.* sterling, including 3,000,000*l.* spent upon the magnificent floating basin at Birkenhead, opened in 1860, containing 120 acres of water space, besides 120 acres of quays, which extend lineally for nearly nine miles.

Among the largest of the docks are the Brunswick, Queen's, King's, Albert, Salthouse, Canning, George's, Prince's, Waterloo, Victoria, Trafalgar, Clarence, Nelson, Bramleymoore, Wellington, Huskisson, Sandon, Salisbury, Collingwood, and Stanley. The three last are connected with the Leeds and Liverpool canal, and most of the others have half tide locks and wet basins.

Of the old docks of Liverpool, the King's Dock, being contiguous to the King's Tobacco Warehouse, receives all vessels from Virginia and other parts laden with tobacco: the Queen's and Brunswick Docks are occupied by ships laden with timber from Honduras, Canada, and the Baltic; the Canning Dock receives coasting vessels, which exchange corn and provisions for colonial produce, and other docks are appropriated to other purposes. All these works are defended on the side next the river by a strong sea-wall upwards of 5 m. in length. Every precaution is taken to prevent the accumulation of mud in the docks by the use of steam-dredging machines; and strict rules, enforced by a vigilant police force, are established to maintain good order, and prevent both fire and depredations.

The docks are all under the management of a Mersey Dock and Harbour Board, appointed by the corporation. Many of the bonding and other warehouses, however, do not belong to the dock estate, but are private property. Most of them are in the immediate vicinity of the docks, but some are at a considerable distance. The difference in the situation of the warehouses in the two ports of London and Liverpool leads to a difference in the mode of discharging and loading ships in each; in London this is done by the servants of the different dock companies; whereas, in the port of Liverpool, it is effected by gangs of private labourers, called *lumpers*, who contract for a specific sum to load or unload a vessel. A great reduction was effected in the scale of the Liverpool dock dues in 1836, and again in 1848, and they are now extremely moderate.

Commerce.—Liverpool is of old renown as a commercial emporium. In the reign of Henry VIII. it is noticed by Leland as a place to which merchants resorted because of her moderate customs, and as being a great mart for Irish yarn. At a later period Liverpool is described by Camden as being 'the most convenient and frequented passage to Ireland,' and more celebrated for her 'beauty and populousness than for her antiquity.' (Gough's Camden, iii. 376, ed. 1806.) Liverpool was once joined for fiscal purposes with Chester, but had more trade than the latter, and therefore could not have been correctly described, as has been reported, as 'the little creek of Liverpool.' In the year 1709, Liverpool had about 8,000 inhab. (a large pop. for that period), and nearly 6,000 tons of shipping; and, as has been stated already, an act was obtained in that year for the construction of a wet dock. Since then her progress in commerce, and in the accumulation of wealth and population, has fully kept pace with the progress of manufacturing industry in Lancashire and the northern counties, for the products of which Liverpool is the natural outlet. Besides, the situation of Liverpool necessarily renders her a principal seat of the trade between Ireland and Great Britain; and as the population and trade of the former increased, it could not fail proportionally to increase the trade of this port.

The gradual filling up of the Dee, and the consequent decline of Chester as a harbour, has also proved of no little advantage to Liverpool, by rendering her the great mart for the salt of Nantwich, and other places in Cheshire, the exportation of which to foreign parts employs a great amount of shipping. Unquestionably, however, Liverpool would never have attained to half her present size or importance, but for the cotton manufacture. Being the port through which Manchester, Oldham, Bury, Bolton, Ashton, and other great seats of that manufacture, could most conveniently obtain supplies of the raw material, and export their manufactured products, she has increased with every increase in this great department of industry; and it is no exaggeration to affirm that the creative influence of the wonderful inventions and discoveries of Hargreaves, Arkwright, Crompton, Cartwright, and the other founders and improvers of the cotton manufacture, has been, though not so direct, quite as powerful in the docks and warehouses of Liverpool, as in the mills of Manchester.

The vast commerce of Liverpool is shown in the following two tables, illustrative of the shipping of the year 1863. The first table shows the total number and tonnage of vessels, both sailing and steam, which entered the port, from various countries, in the year 1863. The table likewise gives the proportion of vessels and tonnage under the British flag, distinct from the total shipping.

Digitized by Google

From Foreign Countries	British Vessels		Total British and Foreign	
	Number	Tons	Vessels	Tons
Russia:				
Baltic Ports	11	3,895	24	7,247
White Sea and Arctic Ocean	13	2,462	25	4,776
Black Sea and Sea of Azof	4	1,086	13	4,430
Sweden:				
Ports within the Baltic	3	944	16	3,196
Ports without the Baltic	5	1,169	5	1,169
Norway	—	—	24	5,337
Denmark	7	1,978	37	5,540
Iceland and Faroe Islands	1	43	20	1,954
Prussia	7	902	63	17,700
Germany	10	2,396	30	7,323
Holland	54	21,179	66	24,896
Belgium	12	1,606	43	6,734
France:				
Ports without the Mediter.	251	72,302	332	86,237
Ports within the Mediter.	20	3,936	23	5,520
Algeria	4	596	7	1,175
Portugal:				
Portugal Proper	245	51,878	283	60,116
Azores	36	3,846	41	4,640
Spain:				
Ports without the Mediter.	140	21,950	210	45,125
Ports within the Mediter.	34	8,358	86	33,914
Philippine Isl.	16	12,715	27	20,880
Italy	148	78,389	177	84,770
Austrian Territories	30	25,285	37	28,953
Greece	27	9,510	29	9,964
Turkey	86	67,743	100	71,134
Wallachia and Moldavia	6	1,518	10	2,584
Syria	5	2,709	6	2,834
Egypt	105	101,403	122	107,328
Tunis	—	—	1	250
Morocco	29	3,586	31	3,813
U. S. of America:				
Atlantic Ports Northern	367	459,101	608	752,336
Do. Southern	7	2,651	19	10,491
Pacific Ports	4	2,180	27	28,353
Cuba and Foreign West Indies	87	25,077	175	47,075
Central and S. America	504	175,854	643	217,999
China (excl. of Hong Kong)	43	28,481	45	29,315
Borneo	1	392	1	392
Japan	1	439	1	439
Western Coast of Africa, Foreign Poss.	89	34,877	92	35,315
	2,411	1,232,436	3,499	1,781,254
From British Possessions.				
Channel Islands	16	1,111	16	1,111
Gibraltar	6	2,652	6	2,652
Malta and Gozo	13	5,872	14	6,067
Ionian Islands	2	268	2	268
Poss. in Africa	15	6,722	16	7,961
East Indies	299	292,401	339	327,155
Hong Kong	16	11,446	16	11,446
Australian Colonies	3	4,082	3	4,082
N. American Colonies	498	406,970	533	437,304
West Indies	224	75,414	238	79,432
	1,092	806,938	1,183	877,478
Total	3,503	2,039,374	4,682	2,658,732

In 1864, the total number of vessels entering the port amounted to 4,045, of which number there were 2,898 British vessels, of 1,372,203 tons burthen, and 1,147 foreign vessels, of 498,292 tons burthen. From British colonies there came 1,127 British and 106 foreign vessels, while from foreign countries there came 1,771 British and 1,041 foreign vessels.

The following table gives the number and tonnage of vessels which cleared the port of Liverpool, to various destinations, in the year 1863:—

To Foreign Countries	British Vessels		Total British and Foreign	
	Number	Tons	Vessels	Tons
Russia:				
Baltic Ports	52	11,035	167	27,705
White Sea and Arctic Ocean	8	1,565	9	1,650
Black Sea and Sea of Azof	2	228	11	3,012
Sweden:				
Ports within the Baltic	1	487	8	2,772
Ports without the Baltic	1	308	1	308
Norway	15	2,340	44	8,493
Denmark	6	849	54	8,173
Iceland and Faroe Islands	4	269	26	2,498
Prussia	10	1,951	80	20,744
Germany	5	746	32	6,124
Holland	59	20,104	72	23,300
Java	1	498	6	3,130
Belgium	32	3,376	76	11,202
France:				
Ports without the Mediter.	218	62,895	259	69,554
Ports within the Mediter.	24	6,836	28	7,794
Portugal:				
Portugal Proper	108	30,192	119	32,091
Azores	40	4,559	46	5,623
Madeira	2	839	2	839
Poss. in India	1	440	1	440
Spain:				
Ports without the Mediter.	44	7,470	107	30,758
Ports within the Mediter.	32	6,565	86	32,892
Canaries	1	113	1	113
Philippine Isl.	2	1,057	4	2,042
Fernando Po	1	374	1	374
Italy	109	89,202	146	99,576
Papal States	3	636	3	636
Austrian Territories	22	22,395	28	25,373
Greece	4	922	8	2,200
Turkey	77	70,367	87	73,812
Wallachia and Moldavia	7	1,286	11	1,873
Syria	6	2,338	7	2,699
Egypt	46	39,657	51	40,999
Morocco	8	1,130	8	1,130
United States of America:				
Atlantic Ports Northern	333	442,727	610	777,797
Do. Southern	9	5,212	20	13,363
Pacific Ports	16	12,604	25	19,367
Cuba and Foreign West Indies	101	38,384	229	73,861
Central and S. America	461	153,968	565	180,853
China (exclusive of Hong Kong)	36	20,131	37	20,789
Siam	—	—	1	253
Sandwich Islands	1	205	4	1,393
Persia	1	909	1	909
Western Coast of Africa, Foreign Poss.	98	35,465	106	36,964
	2,007	1,102,634	3,187	1,674,478

Digitized by Google

To British Possessions	British Vessels		Total British and Foreign	
	Number	Tons	Vessels	Tons
Channel Islands	33	2,442	33	2,442
Gibraltar	66	13,350	72	14,628
Malta and Gozo	20	12,517	26	14,694
Ionian Islands	5	1,849	5	1,849
Poss. in Africa	18	4,732	19	5,038
East Indies	391	375,411	428	404,731
Hong Kong	20	9,820	23	12,504
Australian Colonies	89	96,626	92	98,442
Aden	25	26,884	25	26,884
N. American Colonies	480	316,103	490	320,406
West Indies	191	64,216	203	67,075
Falkland Islands	—	—	1	220
	1,338	923,950	1,417	968,913
Total	3,345	2,026,584	4,604	2,643,391

As regards the quantity of shipping, the port of Liverpool is inferior to that of London, less in amount of tonnage than in number of vessels. On the other hand, as regards the exports of British and Irish produce and manufactures, Liverpool stands far above any port in the United Kingdom, and the value of them, indeed, is nearly equal to that of all the other ports together. The total value of these exports amounted to 50,297,135*l.* in 1862; to 65,154,232*l.* in 1863, and to 72,748,031*l.*, in 1864. In the last-named year, the exports of home produce from London were of the value of 36,554,913*l.*, or only one-half the amount of those from 'the little creek of Liverpool.'

Next to the consequence of Liverpool as a trading port, is its high importance as a packet station, second probably to none in the world, except London. The steamers to New York and other parts of the United States, which, for size, excellent accommodation, and speed, are justly the objects of general admiration, leave the port almost daily, and a splendid fleet of steam ships of unexampled magnitude are engaged in the trade to New York, Boston, Halifax, Rio de Janeiro, Buenos Ayres, Lima, Lisbon, Oporto, and the Mediterranean. There is, also, daily communication with Dublin; and with Waterford, Belfast, Glasgow, the Isle of Man, Drogheda, Wexford, Cork, Bristol, Dumfries, Carlisle, Whitehaven, Wigtown, and other places in the United Kingdom. A host of river steamers are constantly plying for passengers at the various ferries of the Mersey, or running up and down the stream. The gross amount of customs duties received at the port of Liverpool, amounted to 3,661,662*l.* in 1859; to 3,380,937*l.* in 1861; to 3,133,401*l.* in 1863; and to 2,893,445*l.* in 1864.

Manufactures.—Liverpool is not, properly speaking, a manufacturing town: but the vast magnitude of its foreign commerce necessarily demands the practice of a great number of domestic trades, some connected with shipping, and others dependent on the peculiar nature of the traffic of the port. There are several large sugar refineries, iron and brass foundries, public breweries, roperies, glass-staining, and alkali works. The manufacture of soap is more extensively carried on here than in any town of the kingdom, but the business of ship-building has fallen off, and, in this respect, Liverpool is now very inferior to Sunderland, and to her great transatlantic rival New York. Efforts are now, however, being made to recover and revivify the trade.

There are numerous and large manufactories of chain, cables, anchors, and compasses. The making of watches, and watch-movements employs a great number of hands, and large quantities of these articles are exported, with files and tools, produced on a large scale in and near the town. Steam-engines of the best and most powerful kind are made in several establishments, from which have proceeded many of the engines employed on board the largest steam-ships; and this business is every year increasing in importance.

Canals and Railroads.—The commerce of Liverpool has been greatly promoted by the facilities which it enjoys for inland transport, greater perhaps than those belonging to any other town of Great Britain, except Manchester. The Irwell and Mersey navigation (for which an act was obtained in 1720) was the first effort to improve on the resources of nature, almost contemporary with which was the Weaver navigation. By means of the former, raw cotton and cotton goods were conveyed by water to and from Manchester, while, by the latter, the salt of Cheshire was furnished with equal facilities for its transit to Liverpool. The Sankey Brook navigation, completed in 1768, the Duke of Bridgewater's canals, the Trent and Mersey or Grand Trunk canals, and the Leeds and Liverpool canal, were finished in rapid succession, so that, in 1816, the port of Liverpool had a complete water communication, directly or indirectly, not only with the great manufacturing towns of Lancashire, Cheshire, and Yorkshire, from which it derives its chief articles of export, but likewise with the S. cos., and, in fact, nearly every part of England. The following table exhibits some particulars respecting the size and levels of the above-mentioned undertakings.

Canals	Length	Surface Breadth	Depth	Rise and Fall	Estimated Cost
	Miles	Feet	Feet	Feet	£
Mersey and Irwell Navigation	50	..	..	R. 70	*
Weaver do.	24	..	..	F. 50	*
Sankey Brook do.	12	48	5½	F. 78	*
Duke of Bridgewater's Canal	38½	..	..	F. 82½	220,000 ?
Trent and Mersey	93	..	..	R. 326 / F. 134	335,000
Leeds & Liverpool	134	42	5	R. 413 / F. 433½	1,200,000
Total Length of Canal Communication	351½				

Very large fortunes have been realised by the above undertakings; and, notwithstanding the successful competition of railways, they still bring considerable incomes to their proprietors. The facility of transit, however, both for passengers and goods, has been vastly increased since the opening of the railways, by which Liverpool is brought within an hour's distance of Manchester, and both are brought within three hours of Birmingham, and six hours of the metropolis. The act for the Liverpool and Manchester railway was obtained in 1826; the works were completed in 1830, at a cost of 876,000*l.*, or more than double the estimate laid before parliament; and the line was finally opened on the 15th of September of that year, a day that will be long remembered, from its connection with the melancholy death of Mr. Huskisson, one of the most enlightened commercial statesmen of Great Britain. This railway is now incorporated with the London and Birmingham, Grand Junction, and North Union, under the name of the London and North Western Railway,

Digitized by Google

and affords, partly by itself, and partly by the innumerable lines connected with it, an easy and safe means of transit to all parts of the United Kingdom. The station of the Liverpool and Manchester and NW. railway, in the centre of the town, opposite St. George's Hall, is at once a magnificent and a commodious structure. The front, in the Corinthian order, cost 7,000*l*. The Lancashire and Yorkshire, East Lancashire, Chester, and Birkenhead railways have also termini in Liverpool. A plan for connecting these lines with Birkenhead, and the railways in Cheshire, by a tunnel under the river Mersey, has long been in contemplation.

Corporate Establishment.—Liverpool received its first charter of incorporation from King John in 1207, with others from subsequent monarchs. William III. granted it a new charter in 1695, which was confirmed, with a few alterations, by George II. and III.; and by the provisions of this charter the town was governed down to the passing of the Mun. Reform Act in 1835. The bor. is now divided into 16 wards, the corporate officers comprising a mayor, with 15 other aldermen, and 48 councillors. The corporation has the right, under an act passed in 1835, to nominate persons to fill subordinate corporate offices, and is empowered to make 'laws for regulating the police of the town, the docks and the port generally, for lighting and watching the town, and for the suppression of disorderly and immoral practices.' Quarter and petty sessions are held by the recorder, who is appointed by the crown, and the assizes for W. Derby and Salford have been removed hither from Lancaster. The police, organised in 1836, and conducted by a commissioner, is formed, like that of the metropolis, into divisions, with superintendents, inspectors, and sergeants, and is said to be extremely efficient in suppressing crime, and maintaining order both in the town and port. The force consisted in 1864, of 982 men, including a chief constable, with a salary of 800*l*., 12 superintendents, and 72 inspectors.

There is great scope for the committal of offences in Liverpool; and, owing to the number of sailors frequenting the town, and the number of destitute immigrants, Irish and others, that are thrown upon its streets, there is a vast number of petty offences. The number of serious crimes, however, is not very considerable; less, indeed, than might have been anticipated in so motley and excitable a population. Drunkenness is here, as in most similar places, the grand source of disorder.

The bor. jail, erected on the plan of Howard, and formerly used as a depôt for French prisoners, having become too small to admit of the proper classification of the prisoners, a new, enlarged, and improved prison has been recently erected to the N. of the town. The bridewell is well managed. The county house of correction is situated at Kirkdale.

The provision for the poor, in so populous a town as Liverpool, is, of course, on a large scale. The total rental assessed to poor rate was 1,982,635*l*., in 1863. The poor-house, which, from its extent, might be called a little town, is one of the largest in the kingdom. It admits of the perfect classification of the inmates, according to the principles of the Poor Law Amendment Act, and of considerable indulgence being granted to the sick and aged. The pauper children have been removed from this building to the industrial school prepared for their reception at Kirkdale.

The bor. has enjoyed the privilege of sending 2 mems. to the H. of C., since the 25th of Edward I. Down to the passing of the Reform Act, the elective franchise was vested in the freemen and free burgesses. The Boundary Act enlarged the bor. so as to include the out-townships of Kirkdale, Everton, W. Derby, and Toxeth Park. Reg. electors, 17,750 in 1865. The gross annual value of real property assessed to income tax under schedule (A.) was 1,850,408*l*., in 1857, and 2,149,174*l*., in 1862, showing an immense increase of wealth in the short space of five years. The value of real property in Liverpool, assessed to income tax, was as high, in 1862, as that of the whole of the boroughs of Ireland.

LIVONIA (Russ. *Liflandiia*, Germ. *Livland*, or *Liefland*), a marit. gov. of European Russia, on the Baltic, having N. the gov. of Revel, E. the lake Peipus, separating it from the gov. of Petersburg and the govs. of Pskov and Vitebsk, S. the latter and Courland, and W. the Gulf of Livonia. Length, N. to S., about 150 m.; average breadth, 117 miles. Area, including the island Œsel, in the Baltic, 17,500 sq. m. Pop. 883,681 in 1858. The coast and the greater part of the surface are flat and marshy; but in the districts of Venden and Dorpat are some hills of considerable elevation: Eierberg, one of these, being nearly 1,100 ft. in height. There are several extensive lakes: the principal, Virtserf, 24 m. in length by from 2 to 6 m. in breadth, communicates with the lake Peipus by the Embach. Besides the last named, the chief rivers are the Dwina, which forms the south boundary, the Evst, and the Bolder-Aa. The soil, though in some parts loamy, is in general sandy, but being abundantly watered, it is, by proper manuring, rendered very productive. Rye and barley are the principal crops, and more of both is grown than is required for home consumption. Wheat and oats are less cultivated; buckwheat is raised on sandy soils: flax, hops, and pulse are also produced; and the potato culture is on the increase: fruits are of very indifferent quality. In some districts agriculture is tolerably well conducted. The forests are an important source of wealth, and supply excellent timber; they abound, not only with game, but also with wolves, which are sometimes very destructive to the cattle. The rearing of live stock, though not altogether neglected, does not receive adequate attention; the breed of black cattle is, however, in the course of being improved. Horses and sheep are very inferior. The fisheries, both on the coast and in the fresh waters, are important. Chalk, alabaster, and other calcareous materials are abundant.

Rural industry and the distillation of spirits are by far the most important occupations. The manufactures of this government are, however, more extensive than those in its vicinity. The peasantry spin linen yarn, and weave their own cloths; and in the towns, especially Riga, there are sugar refineries, and tobacco, woollen cloth, cotton, linen, glass, and other factories. The N. part of Livonia formerly constituted a portion of Esthonia, and the S. a part of Lithuania. The pop. consists of Esthonians, Lithuanians, Russians, Germans, and (along a portion of the coast) Lifes, the most ancient inhab. of the country, and from whom it has derived its name. About 82,000 of the inhab. reside in the towns, and these, as well as the nobles and clergy, are chiefly of German descent. The prevailing religion is the Lutheran; there are only about 12,000 individuals of the Greek church and other professions of faith. Education is tolerably advanced in the towns, and the university of Dorpat, in this government, is the first in the empire. Livonia has a governor-general, whose authority extends over the government Pskov and the other Baltic provinces; but it has its own provincial assembly and magistracy, and has preserved many peculiar privileges,

Digitized by Google

among which is that of exemption from the state monopoly of ardent spirits. It was divided into 9 districts by Catherine II.: Riga is the capital and centre of its commerce; the other chief towns are Dorpat, Pernau, Fellin, and Arensburg in the island Œsel.

Livonia was conquered by the Danes in the 12th century, and held by the Teutonic knights from 1346 to 1561. It afterwards belonged to Poland, and next to Sweden; but was definitively annexed to Russia, by the treaty of Nystadt, in 1721.

LIXURI. See CEPHALONIA.

LIZARD POINT, a bold headland, on the British Channel, being the most southerly promontory of England, on the S. coast of Cornwall, 23 m. ESE. the Land's End; lat. of highest light-house, 49° 57′ 41″ N., long. 5° 11′ 5″ W. The Lizard is famous in navigation, from its being the point whence ships usually take their departure from the Channel, and being, also, the best place for a land-fall when homeward bound. It is surmounted by 2 light-houses with *fixed* lights, at a short distance from each other, the lantern of the one being 225 ft. and of the other 221 ft. above the level of the sea. Some steep rocks, called the Stags, lie to the S. of the Lizard.

LLAMPETER, or LAMPETER, a parl. bor., market town and par. of S. Wales, co. Cardigan, hund. Movddyn, 25 m. E. by N. Cardigan, and 180 m. W. by N. London. Pop. of parl. bor., which is contributory to Cardigan, 989, and of par. 1,426 in 1861. The town, which stands on a slope about ½ m. N. of the Teify (crossed here by a stone bridge), appears to have been larger formerly than at present, when a score of tolerably built houses and about 100 cottages comprised the whole of its private dwellings. The church, which stands on an eminence at the N. end of the town, is very ancient, and being shaded with venerable yews, has a picturesque appearance. There are also two chapels for Calvinistic Methodists and Presbyterians. The chief ornament of the place is the College of St. David's, a handsome Gothic structure erected in 1825. This institution, founded by George IV. in 1822, at the suggestion of the bishop of St. David's, and endowed with 6 livings, is intended to furnish clerical instruction for the clergy of the S. part of the principality. The students reside within the college, the business of which is conducted by the principal, who gives theological instruction, and is assisted by Greek, Hebrew, Welsh, and other professors. The course of instruction lasts two years, and is attended, at an average, by about 60 students, whose necessary expenses do not exceed 55*l.* a year. The bishop of the diocese, who is the visitor, ordains none except graduates of the English universities, or certificated students of Llampeter College. The town is of little trading importance. Markets on Saturday. Fairs, well attended, for horses, cattle, and hogs, Jan. 11, Wednesday in Whitsun-week, July 10, first Saturdays in Aug. and Sept., Oct. 19, and first Saturday in Nov. The town is incorporate, governed by a portreeve, and sessions are held annually by the co. magistrates on the second Wednesday in Oct.

LLANDEILO-FAWR, a market town and par. of S. Wales, co. Caermarthen, hunds. Caro and Perfedd, on the Towy, 13 m. E. by N. Caermarthen, and 169 m. W. by N. London. Pop. of par. (including 10 hamlets), 5,440 in 1861. The town, situated in the beautiful and interesting vale of the Towy, is small and ill-built, the only public buildings being an old church, and 4 places of worship for dissenters. Newton, Park, the residence of Lord Dynevor, and Golden Grove, belonging to Earl Cawdor, are the principal country-seats of the neighbourhood, which is very productive, and has some rich mines of coal and iron. A railway connects this coal-field with the port of Llanelly. Quarter sessions are held here, and Llandeilo-fawr is one of the polling places for the co. Markets well-supplied with corn, on Saturday: fairs, Feb. 20, May 5 and 12, June 21, Aug. 23, and Nov. 12.

LLANDOVERY, a mun. bor. and market town of S. Wales, par. Llandingad, co. Caermarthen, hund. Perfedd, 23 m. ENE. Caermarthen and 162 m. W. by N. London, on the South Wales railway. Pop. of bor. 1,855 in 1861. The town, agreeably situated in the upper part of the vale of the Towy, at a short distance from that river, has one principal avenue, and 8 other streets lined with respectable houses. The keep of an old castle, destroyed by Cromwell, occupies the summit of an insulated rock, and forms a chief feature of the place. The par. church stands a little S. of the town, and there are likewise 4 places of worship for dissenters, with attached Sunday schools. National and Lancastrian schools are established, and there are almshouses and other charities for the aged poor. There is little trade or traffic of any kind in Llandovery. It is a mun. bor., governed since the Municipal Reform Act, by a mayor and 3 other aldermen, with 12 councillors. The petty sessions for the hund. of Perfedd are held here, and Llandovery is one of the polling places at the elections for the co. Markets on Wednesday and Saturday: cattle fairs, Wednesday after Jan 17, the 2d Wednesday after Easter, Whit-Tuesday, July 31, and Nov. 26.

LLANELLY, a parl. bor., sea-port, market town, and par. of S. Wales, co. Caermarthen, hund. Caernwallon, 13 m. SE. Caermarthen, 10½ m. WNW. Swansea, 174 m. W. by N. London by road, and 225 m. by Great Western railway. Pop. of parl. bor. 11,446, and of par. 17,279 in 1861. The town is irregularly built, on a creek near the sea-shore; but some of the houses are good, and the place, on the whole, appears to be thriving. The church is an old irregular structure, remarkable as having two towers, one embattled, and the other surmounted by a steeple: the living is a vicarage, and within the par. are two chapels-of-ease. Dissenters also of different denominations have places of worship. A free school and two other schools, chiefly supported by subscription, furnish instruction to the children of the poor; and there are four charities for the relief of the sick and aged. Llanelly is situated in the midst of the rich mineral basin of S. Wales. Four large collieries at Llangenneck employ upwards of 500 persons; and the abundance of excellent coal, a part of which is exported to France, Spain, and the Mediterranean, for the use of steam-boats, has caused the establishment of the Llanelly and Cambrian copper-works. The ore is imported chiefly from Cornwall; and the copper-cakes and sheathing are sent to Liverpool, and other ports of the kingdom. There are also two iron-foundries, but both are air-furnaces, and of no great importance. The town has four docks, two of which are floating basins, the largest being capable of accommodating no less than 50 vessels of 500 tons register. On the 1st of January, 1864, there belonged to the port 31 sailing vessels under 50, and 48 above 50 tons, besides 4 small steamers, of a total burthen of 98 tons. The gross customs revenue amounted to 2,926*l.* in the year 1863.

The interests of the town have been recently much promoted by the construction of a railway, with branches into different parts of the fine coal-field near Llandeilo; and it is probable that Llanelly

Digitized by Google

will, at no distant period, become one of the principal trading ports of the principality. The parl. bor., which is contributory to that of Caermarthen, includes the bor. hamlet, with some additions. Registered electors in both bors., 838 in 1865. The bor. is governed by a portreeve and burgesses, and had formerly both civil and criminal jurisdiction. Markets on Thursday and Saturday: fairs on Ascension Day and Sept. 30.

LLANGADOG-FAWR, a market town and par. of S. Wales, co. Caermarthen, hund. Perfedd, on the Towy, here crossed by a handsome stone bridge, 19 m. E. by N. Caermarthen, and 167 m. W. by N. London. Pop. of par. 2,789 in 1861. The town has two wide streets, with a few well-built houses and numerous cottages. An old church and 3 dissenting places of worship are the only public buildings, besides a ruinous old castle. Woollen stockings and coarse woollen cloths are made here; but the chief business is the sale of farm produce at the fairs and markets, which are very considerable. Markets on Thursday; fairs, March 12, July 9, Thurs. after Sept. 11, and 2d Thurs. after Oct. 10.

LLANGOLLEN, a town of N. Wales, co. Denbigh, hund. Chirk, on the Dee, 20 m. SW. Chester, 166 m. NW. London, and 201¾ m. by Great Wstern railway. Pop. of par. 5,799 in 1861. The town, beautifully situate in a deep, narrow vale, enclosed by lofty mountains, and watered by the Dee, which is crossed here by a good stone bridge, consists of one principal and a few smaller streets, lined with old and mean houses, interspersed with a few handsome modern dwellings. The church, in the early English style, has services both in English and Welsh: there is a chapel-of-ease at a hamlet within the par., and the dissenters have three places of worship. The inhab. derive their chief support from summer visitors, who, in making the tour of N. Wales, usually make some stay here, in order to enjoy the fine scenery of this vale, which in some respects excels that of the vale of Clwyd and Festiniog. Many families, also, reside here during summer, so that Llangollen may be considered as a sort of watering-place. The Reform Act made it a polling-place for the county. Markets on Saturdays. Fairs, March 17, May 31, and Aug. 21.

About 1 m. from Llangollen, situated on a high and steep conical hill, are the ruins of the castle of Dinas Bran, once a fortress of considerable strength; and about 1 m. beyond, nearly in the same direction, are the majestic remains of Valecrucis Abbey, still in tolerable preservation: the name of this abbey is derived from a pillar or cross, situated in an adjoining field, supposed to be of high antiquity. Four miles from the town, and in another direction, is the Cysylltau aqueduct, by which the Ellesmere canal is conveyed across the Dee, a noble structure of nineteen arches, raised 126 ft. above the river, at a cost of 47,000*l*.

LLANIDLOES, a parl. bor., market town and par. of N. Wales, co. of Montgomery, hund. Llanidloes, at the confluence of the Clevedoz with the Severn, 37 m. WSW. Shrewsbury, 158 WNW. London, and 232 m. by London and North Western railway. Pop. of bor. 3,127, and of par. 3,987 in 1861. The town is situated in a valley on the E. bank of the Severn (crossed here by a handsome stone bridge of three arches), and is surrounded on all sides by lofty hills: the buildings have increased rapidly, and several respectable houses have been substituted for others composed of wood and plaster, which formerly gave the place a mean appearance. A new town-hall stands nearly in the centre of the town. The church, built in 1542 on the site of an older structure, and very recently repaired, is chiefly remarkable for a ceiling of delicately carved oak, and for a square tower of great antiquity. There are also places of worship for Independents, Wesleyans, Calvinistic Methodists, Baptists, and the Society of Friends.

Flannel and other woollens are the principal articles manufactured in Llanidloes, and the present improved condition of the town is wholly attributable to its trade in these articles. The spinning of wool is conducted in mills, but the cloth is wholly made by hand-looms. The wages of the best weavers are 10*s*. a week, but the average is about 7*s*. Spinners earn about 12*s*. Within the par. is the lofty mountain of Plinlimon, or, more properly, *Pumlummon*, 'the five-peaked hill,' on which are the sources of the Severn, Wye, and Rheidiol; and at the foot of the range there are slate quarries and lead mines, the produce of which contributes to the support of the place.

Llanidloes is a corporate town, having a mayor, coroner, and other officers, elected at a court-leet: it was not considered sufficiently important to be included in the provisions of the Municipal Reform Act. The Reform Act made it a parl. bor., contributory to Montgomery, which sends one mem. to the H. of C.; and the electoral limits comprise, besides the town, a considerable extent of surface on both sides the Severn. Registered electors in all the bors., 954 in 1865. Markets on Saturday: fairs, April 5, May 11, June 21, July 17, Sept. 13, Oct. 2 and 28.

LLANRWST, a town of N. Wales, partly in co. Caernarvon and partly also in co. Denbigh, on the Conway, 37 m. W. Chester, and 183 m. NW. London, on a short branch line of the Chester and Holyhead railway. Pop. of par. 3,993 in 1861. The town, in a spacious vale, surrounded by lofty and well-wooded hills, stands chiefly on the E., but partly also on the W. bank of the Conway, which is crossed here by an elegant bridge, constructed in 1636, from the designs of Inigo Jones. Three considerable streets, lined with tolerably built houses, branch from a spacious market-place, in the middle of which is the town-hall, a substantial brick structure. The church, an old and small building, has adjoining to it the Gwydir chapel, a square castellated edifice, originally erected as a family mausoleum, by the Wynne family, and now used as a place of worship. It has many monuments; but its chief celebrity is owing to its containing the remains of the great Lewellyn, removed thither from the abbey of Aberconway, in which they were originally interred. There are also a number of chapels for dissenters within the par., and some good Sunday schools. Llanrwst, formerly noted for its harp manufacture, depends at present almost entirely on its retail trade, for the spinning and knitting of wool has become quite insignificant. It derives considerable advantages from its position on the Conway, which brings up vessels of 60 tons burden to Trefriew with coal, lime, and timber, in return for slate and iron. Gwydir Castle, a rather large and very elegant modern structure, is situated about ½ m. from the town. Markets on Tuesdays and Saturdays. Fairs on March 8, April 25, June 10, Aug. 10, Sept. 17, Oct. 25, and Dec. 11.

LLANTRISSENT, a parl. bor., market town, and par of S. Wales, co. Glamorgan, hund. Miskin, 10 m. NW. Cardiff, 140 m. W. London, 181¼ by Great Western railway. Pop. of parl. bor. 1,493, and of par. 5,492 in 1861. The town, which stands on a commanding eminence overlooking the vale of Glamorgan, consists of only three or four narrow and irregular streets, lined with old and ill-built

Digitized by Google

houses. The town-hall and market-house were erected by the Bute family, who are lords of the manor, and the principal landowners in the par. The church is a large structure in the Norman style, the living being a vicarage in the gift of the dean and chapter of Gloucester cathedral. There are also two chapels of ease in the out-townships, and several places of worship for dissenters, with attached Sunday schools. The ruins of an old castle with a high tower stand close to the town; and, at a short distance, are some interesting remains of an old monastery. Llantrissent has very little trade; but coal, lead, and iron are found in considerable quantities, in the hamlet of Pentyrch, and sent to Cardiff for exportation. The charter of the bor. was granted by Edward III., and the government is vested in a portreeve, constable, and twelve aldermen, whose privileges were left untouched by the Municipal Reform Act. Llantrissent is a parl. bor., contributory with Cowbridge to Cardiff, which sends one mem. to the H. of C. Registered electors in all the bors., 1,669 in 1865. Markets on Friday; fairs, Feb. 13, May 12, Aug. 12, and Oct. 29.

LLERENA, a town of Spain, Estremadura, prov. Badajoz, 59 m. N. Seville, and 200 m. SW. Madrid. Pop. 6,215 in 1857. The town stands on a plain at the foot of the Sierra San Bernardo, which separates Estremadura from Seville; and has two par. churches, four convents, and a hospital. The inhab. are chiefly engaged in grazing sheep and cattle on the rich pastures of the vicinity, and in collecting oak-bark, galls, and timber from the neighbouring forests.

LO (ST.) (an. *Briovera*), a town of France, dép. La Manche, of which it is the cap., on the Vire, and on the railway between Paris and Cherbourg, 156 m. W. by N. the former. Pop. 9,810 in 1861. The town is ill laid out; streets steep and irregular; they mostly lead from a square in the highest and central part of the town, which has several of the principal public buildings. Among the few that deserve notice are, the church of Notre Dame, with two lofty spires; that of St. Croix, built in 805, and considered the best specimen of Saxon architecture in France; the prefecture, a handsome new edifice; the town-hall, judicial court, prison, hospital, theatre, and a bridge of six arches over the Vire. The environs are picturesque and agreeable. St. Lo is the seat of tribunals of original jurisdiction and commerce, a chamber of manufactures, and a communal college. It has a public library with 2,500 vols., a philharmonic society, societies of agriculture and commerce, manufactures of fine woollen cloths, druggets, canvass, serges, calicoes, lace, and cutlery, and considerable trade in thread, iron, salt butter, cider, honey, and cattle. It derives its present name from a bishop of Coutances in the 6th century.

LOANGO, a kingdom of W. Africa, on the Atlantic Ocean, bounded N. by Mayomba, and S. by Congo, from which it is separated by the Zaire. The coast is high and abrupt, but the hills are covered with earth and luxuriant vegetation. The soil is generally a stiff loam, and very productive; but near the coast is an extremely fine sand, that is carried about by the lightest breeze. The lakes and rivers, of which there is a considerable number, abound with fish, and in the forests are found tiger-cats, ounces, hyenas, monkeys, antelopes, hares, and other game. The climate is excessively hot; it sometimes rains, but the dews are sufficient for vegetation. Almost the only grains are manioc, maize, and a species of pulse called *msangen*, rudely cultivated by women, who merely stir the ground to the depth of an inch, and cover up the grain, to prevent its being devoured by birds, and even this slender culture is confined to small patches round the villages. The rest of the country is covered with luxuriant herbage, rising to the height of 8 feet, allowed by the people to grow, ripen, and wither, without being applied to any use. Sometimes, however, they set fire to it, producing a wide-extended conflagration over the whole country, the coast appearing from the sea to be on fire. The finest fruits grow wild, and the sugar-cane attains an extraordinary size. The tree called the mapou is distinguished, like the baobab, by the enormous dimensions of its trunk. Palm trees are very plentiful, particularly that species from which the natives extract their favourite liquor. The potato and yam are also abundant. The Chinese hog is the only animal reared for domestic use, the natives having altogether neglected the breeding of sheep, cattle, and horses, formerly introduced by the Portuguese, and still abundant at their settlement of St. Paul de Loanda. The inhabs. usually reside in villages or clusters of straw huts in the midst of palm groves. They seem to be in the lowest state of degradation, being incorrigibly indolent, debauched, filthy, cowardly, and superstitious in the extreme. The country is divided among several chiefs, who, though often at war with each other, acknowledge the supreme authority of the king of Loango, the cap. The latter is elective and absolute, but the judicial power is vested in the *cabals* or assemblies of the different villages. Loango, called *Borai* by the natives, about 2 m. from the coast, in lat. 4° 36′ S., long. 12° 20′ E., has been said to have a pop. of 15,000 persons. It is nothing more than a collection of huts. This and the ports of Kabenda and Mayomba, also, in Loango, were formerly among the principal slave marts on the coast of Guinea.

LOCHES, a town of France, dép. Indre-et-Loire, cap. arrond., on a hill beside the Indre, 23½ m. SE. Tours. Pop. 5,267 in 1861. The town is irregularly laid out, and its streets are narrow; but it is clean, and has many good houses. Its castle, on a plateau, at the summit of the hill on which the town is situated, has gained considerable notoriety in French history. It appears to have been built in the last ages of the Western Empire, and is one of the most remarkable remains of that period now existing in France. Charles VII. defended it successfully against the English; Louis XI. made it a state prison; and here Cardinal Balue, of infamous memory, was confined in an iron cage for eleven years. It is now mostly destroyed, what remains being occupied by the sub-prefecture and the prison. The palace of Charles VII., now the municipality, is a large oblong building on the bank of the Indre: it was long the residence of Agnes Sorel, whose remains are deposited in a chapel in a tower of her erection. The church of Loches, originally founded in 450, is a singular piece of architecture with four steeples, two of which are about 160 ft. high. Loches communicates with the little town of Beaulieu by several bridges over the Indre. It is the seat of a tribunal of primary jurisdiction, and a communal college; and has manufactures of linens and coarse woollen cloths, paper, and leather.

LOCHMABEN, a royal and parl. bor. and market town of Scotland, co. Dumfries, in a level country, surrounded by several lochs or lakes, 10 m. NE. Dumfries, and 32 m. NW. Carlisle, on the Caledonian railway. Pop. 1,544 in 1861. The town consists of one extremely wide street, more or less overgrown with grass. The public buildings are a town-house, parish church, and a dissenting chapel. It has no manufactures, and was lately,

Digitized by Google

and perhaps still is, the poorest royal bor. in Scotland. Lochmaben owes its origin to the protection afforded by a castle of the same name, built in the twelfth century by the Bruces, lords of Annandale, from whence King Robert Bruce was descended. The site of this fortress, surrounded by a deep fosse and moat, is still called the castle hill. Robert Bruce built another strong castle on a peninsula, on the SE. side of the Castle Loch, which, with its outworks, covered nearly 16 acres. The walls, in the few places where they are still entire, are 12 ft. thick. It was preserved as a border fortress till the union of the crowns, since which it has gradually gone to decay. Bruce parcelled out the barony of Lochmaben, called the 'Four Towns,' as it contains four villages, among his retainers, in small patches, on the condition that the occupants should furnish a certain amount of provisions for the use of the royal fortress. These persons, who are called the 'king's kindly tenants,' had no written title to the lands; and at present, in case of a sale, a simple deed of conveyance is sufficient; and the succession is taken up without any feudal service. Owing to a misunderstanding between these tenants and the keeper of Lochmaben Palace, Charles II., in 1664, guaranteed to them the perpetuity of their leases, and relieved them from every burden, except the rents and services paid by their ancestors in 1602, which are nominal merely. The tenants are a poor but contented class, having little intercourse with the rest of the community. Many of the inhab. of the bor., like the 'king's kindly tenants,' are owners of small patches of land, there being within the bor. no fewer than 141 small proprietors. Lochmaben unites with Annan, Sanquhar, Dumfries, and Kirkcudbright in sending a member to the H. of C. Registered voters, 52 in 1865.

LOCHWINNOCH, a manufacturing town of Scotland, co. Renfrew, on the Calder, a stream which terminates in Castle Semple Loch, and on the railway from Glasgow to Ayr, 15½ m. SW. Glasgow, and 25½ m. N. Ayr. Pop. 1,910 in 1861. The town, which is sheltered in every direction except the SE., either by rising grounds, or thick plantations, has a main street (½ m. long), with others crossing it at right angles. It also has a parish church, a free church, a chapel belonging to the Associate Synod, several public libraries, and various friendly societies. Manufactures were early introduced into Lochwinnoch, but those of linen and silk have disappeared. Thread-making was introduced in 1723: at one time there were about 20 thread-mills in the place; but the business is now nearly discontinued. Cotton is the staple manufacture. Three cotton mills employ about 600 persons and there are above 200 weavers employed by the manufacturers of Glasgow and Paisley. There is a mill for carding and spinning wool, and one of the best corn-mills in Scotland.

LOCKERBIE, a market town of Scotland, co. Dumfries, in the centre of a rich and fertile country, on the railway between Carlisle and Glasgow, 37 m. NW. the former, and 66 m. SE. the latter. Pop 1,709 in 1861. The town is neat and regularly built, and has been materially increased and improved since the opening of the Caledonian railway, which passes close by the town. It has a par. church, a free church, and a chapel belonging to the Associate Synod. Lockerbie has long been distinguished for its excellent schools. There are two fairs and ten markets annually. The fairs are exclusively, or at least principally, for lambs and wool. When the border feuds had so far ceased (after the union of the crowns) as to allow a slight intercourse between the English and Scotch, the sheep farmers of the S. of Scotland assembled here to meet the English dealers. This was the origin of these fairs, which have been long very important. The Lammas fair (2nd Monday in Aug.) is the largest lamb fair in Scotland. The ten markets have each a somewhat different object; one of them being for hiring servants, another for black cattle and horses; while those in winter are principally for pork, which is largely produced in the vicinity.

LODEVE, a town of France, dép. Herault, cap. arrond., on the Ergue, at the foot of the Cevennes, 27 m. WNW. Montpellier, on a branch line of the railway from Montpellier to Toulouse. Pop. 11,864 in 1861. The town is ill built; is surrounded by old fortifications; and has an old cathedral, formerly a bishop's see. In Lodève and its neighbourhood, from 7,000 to 8,000 workpeople are employed in the manufacture of woollen cloth for the army, and nearly all the inhab. of the town are in some manner connected with this business, at least three-fourths of the pop. belonging to weavers' families. The government demand for this cloth being constant, the people engaged in its manufacture have nearly always employment, and their condition is consequently better than that of most of those in the ordinary departments of industry. The workpeople are said to be active, industrious, and particularly sober. But there has been but a very slight increase of population within the last twenty or thirty years.

LODI, a city of North Italy, prov. Milan, on the Adda, here crossed by a wooden bridge, and on the road from Milan to Piacenza, 18 m. SE. Milan. Pop. 21,540 in 1862. The town is situated on slightly rising ground, and is surrounded by old walls, and entered by four gates. It is generally well-built, and has broad and regular streets, an old citadel, now dismantled, and converted into barracks, numerous churches, a large hospital, a theatre, several handsome palaces, and a large market place surrounded with arcades. The church *della Incoronata* is said to have been designed by Bramante; it has a fine rotunda, and is ornamented with frescoes and paintings by Calisto, a pupil of Titian. In the cathedral is the 'Murder of the Innocents,' by the same artist. Lodi is a bishop's see; and it has a royal and ecclesiastical gymnasium, a public library, a normal school, orphan and foundling asylums, a workhouse, a large porcelain factory, and manufactures of linen fabrics. It is the centre of the trade in Parmesan cheese.

Lodi is famous in modern history for the victory achieved here on the 10th of May, 1796, by Napoleon in his first Italian campaign. The cannon of the Austrians swept the bridge behind which they were drawn up; but it was, notwithstanding, forced by the French at the point of the bayonet, and the Austrian army totally defeated. On this occasion, the intrepidity and gallantry of Napoleon shone as conspicuously as his skill as a tactician.

LOFFODEN ISLES, a group of islands on the coast of Norway, between lat. 67° 40′ and 69° 30′ N., and long. 11° 40′ and 16° 20′ E. There are five larger and several smaller islands, having in all from 3,000 to 4,000 inhab. The principal (taking a SW. direction) are, Andöen, Langöen, and Hindöen, which is the largest of the whole group, and, with six others, forms, on the side of the Norwegian continent, the great gulf of West Fiord. The coasts of these islands are extremely irregular, and they rise into lofty and rugged mountains, covered with perpetual snow, and in some places with glaciers. There are no trees, but only a few stunted shrubs, grass, and cryptogamous plants; nor are these islands of any impor-

Digitized by Google

tance, except on account of the fisheries, which are very extensive and valuable. 'In the beginning of February the cod-fish set in from the ocean and occupy the banks in West Fiord. These banks are from 3 to 10 m. out on the Fiord, at a depth of from 60 to 80 fathoms; and the fish crowd so much together while depositing their spawn, that it is said a deep sea lead is often interrupted in its descent to the bottom through these *fish-hills*. The fishermen assemble in the month of January at the different stations, and the fish are caught by nets and long lines, set at night, and taken up in the morning. An outfit, or company, consists of 2 boats, each having 5 men, and provided with 6 or 8 nets; and every 20 or 30 of these companies have a large tender to bring out their provisions, nets and lines, and to take the produce to market. The fish are cured as round or stock fish till April, after which they are split, salted, and carried to Drontheim, or other places to be dried on the rocks, like the Scotch-dried cod. The stock-fish are merely gutted and hung up, two together, across poles, and are dried, without salt, in the wind. In a medium year there were 2,916 boats fishing in 83 different stations, accompanied by 124 tenders, the number of men in all being 15,324. The produce amounted to 16,456,620 fish, which, when dried, would weigh 8,800 tons; there were also 21,530 barrels of cod-oil, and 6,000 barrels of cod-roe. This important winter-fishery ends in the middle of April. The herring fishery on these shores is of much less consequence.' (Laing's Norway, p. 399–403.)

LOGHUR (*Lohagur*, 'the iron fort'), a strong hill fort of Hindostan, prov. Aurungabad, in the British territories, 30 m. NW. Poonah. From the perpendicular height of the rock on which it is built, this fortress could not, if properly defended, be taken by storm. It is supplied with water by numerous tanks and springs, and has extensive excavated magazines. It came into the possession of the British in 1818.

LOGRONO (an. *Juliobriga*), a town of Spain, in Old Castile, prov. Soria, on a spacious plain on the Ebro, which is here crossed by a handsome bridge, 57 m. WSW. Pampeluña, and 158 m. NE. Madrid. Pop. 10,466 in 1857. The town comprises, besides several good streets, two fine squares, with a collegiate church, 5 par. churches, 8 convents, and 2 hospitals. It has tanneries, distilleries, and fabrics of saddles, hats, and candles.

LOHEIA, a sea-port town of Arabia, the most northerly in the territ. of Yemen, on the Red Sea, 175 m. NNW. Mocha, lat. 15° 41′ 20″, long. 42° 46′ 14″. It stands on low ground, sometimes inundated by the sea. Its port is so shallow that vessels of even small burden are obliged to anchor at a considerable distance off shore. The environs are arid and sterile, and the town is ill supplied with water. It is not walled, but is defended by several towers at equal distances round it, though only one of these is defensible by cannon. A few houses are of stone, but the greater part are mere mud huts, thatched with grass, with a straw mat for the door, and rarely any windows. The chief edifices are, a mosque, with the tomb of the Mohammedan saint who founded the town; the governor's residence; the custom-house, and some coffee warehouses. The coffee shipped at Loheia is inferior to that of Mocha, but it notwithstanding carries on a considerable trade in it with Cairo, through Djidda. Lime is prepared in the neighbourhood by the calcination of coral, and near the town is a salt mine.

LOIR-ET-CHER, a dép. of France, reg. centre, between lat. 47° 15′ and 48° 10′ N., and long. 0° 30′ and 2° 15′ E., having N. Eure-et-Loire, E. Loiret and Cher, S. Indre and Indre-et-Loire, and W. the latter and Sarthe. Length, NW. to SE., 80 m.; breadth varying from 20 to 45 m. Area, 635,092 hectares; pop. 269,029 in 1861. Surface mostly plain, with a general inclination towards the W. The Loire intersects the dép. nearly in its centre in a direction from E. to W.; the other chief rivers are, in the N. the Loir, a tributary of the Sarthe; and in the S. the Cher, Bouncheure, and Cosson, affluents of the Loire. In the S. of the department are numerous pools and marshes, which in the arrondissement of Romorantin cover nearly 3,400 hectares. It is estimated that 369,627 hectares of the surface are arable, 31,634 occupied with pastures, 26,591 with vineyards, 70,210 with woods, and 80,096 with heaths, wastes, &c. More corn is grown than is required for home consumption. The annual produce of wine is estimated at above 900,000 hectolitres, some of which is of mediocre quality. The wines are principally made into brandy and vinegar; but a peculiar variety, of a very deep dark hue, is extensively employed to deepen the colour of other red wines, and to give a reddish tint to white wines. Beans and peas, fruit, hemp, liquorice, and beet-root are raised in considerable quantities. A good many poultry and bees are reared. The rural pop. is in a very depressed condition; the labouring class occupy miserable huts, and in one village the habitations are said to be mere caves dug in the rock. Landed property is much subdivided, though not more so than in the neighbouring departments. Iron, turf, and alabaster are met with, but the most valuable mineral product is flint: the most extensive beds of which in France are in the S. part of this dép., which furnished the greater part of the gun-flints formerly used in France. The employment was very injurious to the health, and most workmen died of chest diseases before they attained to 30 years of age. The dép. has several iron forges, tile and glass factories, and potteries, with manufactures, though on a small scale, of serge, woollen cloth, and other woollen fabrics, cotton and hempen cloths, paper, leather, and chemical products. It is divided into 3 arronds.; chief towns, Blois, the capital, Romorantin, and Vendôme.

LOIRE (an. *Liger*), the principal river of France, through the central part of which it flows in a W. direction to its *embouchure* in the Atlantic. Its basin, which comprises nearly 1-4th part of the country, has the basin of the Seine on the NE., that of the Garonne on the SW., and that of the Rhone on the E. It rises in Mount Gerbier de Joncs, on the W. declivity of the Cevennes, in the dép. Ardèche, about lat. 44° 38′ N., long. 4° 30′ E., at an elevation of 4,593 ft. above the sea. Its general direction is NNW. to near Orleans, after which it flows mostly WSW. to its mouth near Paimbœuf, in about lat. 47° 15′ N., and long. 2° 15′ W. Its entire course is estimated at 670 m., of which 512 are navigable. Before losing itself in the ocean it spreads out into a considerable æstuary; below Nantes it is between 2 and 3 m. in width; but its navigation in the lower part of its course is rendered difficult by shallows and numerous islands. Ships of 900 tons, though built at Nantes, are loaded at Paimbœuf or St. Nazaire; and all ships of considerable burden unload nearly 30 m. below Nantes, their cargoes being conveyed to that city by lighters. During the first 40 m. of its course, the Loire has an average descent of more than 50 ft. a mile: its rate of descent afterwards averages 4 ft. a mile. Its current is everywhere rapid, and its inundations are frequently productive of much damage;

Digitized by Google

to prevent which extensive embankments have been erected along its banks below Orleans.

The tide of the Loire rises to about 5 m. below Nantes. Its chief tributaries are the Maine, Endre, and Brive from the N.; and the Allier, Loiret, Cher, Indre, Vienne, and Sevre-Nantaise from the S. It is connected with the Seine, by means of the Orleans, Briare, and Nivernais canals; with the Rhone by the Canal du Centre; and with Brest Harbour and the English Channel by the Nantes and Brest canal. To obviate the impediments to navigation from sandbanks, above Orleans, a lateral canal, commenced in 1822, has been constructed along the river; it begins opposite the mouth of the Briare canal, in the dép. of Loiret, and runs along its SW. bank till it terminates opposite the Canal du Centre, in the dép. of Allier. The entire length of this canal is 123 m. The scenery along the Loire, though in parts very fine, is generally surpassed by that of the Rhone. Some very important cities stand on its banks, among which, reckoning from its source, may be specified, Roanne, Nevers, Orleans, Blois, Tours, Saumur, Ancenis, and Nantes.

LOIRE-HAUTE, an inland dép. of France, between lat. 44° 45′ and 45° 24′ N., and long. 3° and 4° 40′ E., having N. Puy-de-Dôme and Loire, SE. Ardèche, and SW. Lozère and Cantal. Area, 496,225 hectares. Pop. 305,521 in 1861. It is generally mountainous, with a slope to the N. The Cevennes mountains run along its SW. border, and a range, passing off laterally from them, intersects the dép. about its centre, and afterwards bounds the dép. of Loire on the W. But most of its mountains belong to the volcanic system of France. The Loire and Allier are the principal rivers, and receive numerous small streams within the dép.: there are many small lakes and pools around Le Puy and elsewhere. The bottoms of the valleys are fertile, but not the other parts of the dép., by far the greater portion of the surface being stony or sandy. It is estimated that there are 226,072 hectares of arable land, 79,432 ditto meadow, 74,030 ditto woods and forests, and 90,239 ditto heaths. Agriculture is extremely backward; half the arable land is constantly in fallow, and the occupiers are poor. Sufficient corn, chiefly rye with some wheat, is, however, grown for home consumption; and about 50,000 hectol. of wine are annually imported. The natural pastures are good, and their irrigation is pretty well conducted. There are about 188,000 head of cattle and 278,000 sheep in the dép.; the latter yielding about 350,000 kilog. a year of wool. The rural pop. is, in general, very poor, and about 3,000 individuals annually leave the dép. in search of employment in the other déps. as reapers, road-makers, and day labourers, and usually return, after about six months' absence, with sums supposed to average about 70 fr. each. The land is very much subdivided, and there are fewer large properties in this than in any other dép. of France, Corrèze only excepted. Haute-Loire yields annually about 200,000 metrical quintals of coal, worth as many francs, and a little iron, zinc, and antimony. Manufactures are confined to common linen fabrics, lace, tiles, bricks, earthenware, silk, riband, and organzine in small quantities. Le Puy has a small lace manufacture, and is the great entrepôt for the small bells (*grelots*) used by the muleteers and waggoners of the S. of France. Haute-Loire is divided into three arrouds.; chief towns, Le Puy, the cap., Brioude, and Yessengeaux.

LOIRE-INFERIEURE, a maritime dép. of France, formerly included in the prov. of Brittany, between lat. 46° 50′ and 47° 50′ N., and long. 1° and 2° 30′ W., having N. Morbihan and Ille-et-Vilaine, E. Maine-et-Loire, S. Vendée, and W. the Atlantic. Area, 687,456 hectares. Pop. 580,207 in 1861. The Loire has its mouth in this dép., which it intersects from E. to W. near its centre. The Erdre, Sevre-Nantaise, Maine and Moine, affluents of the Loire, are the other chief rivers, all of them being navigable for some distance. The Vilaine skirts the NW. extremity of the dép., and communicates with the Loire by the canal between Nantes and Brest. Lakes and pools are estimated to cover 7,200 hectares; the chief of these is the *Grand Lieu*, in the S., 4 m. in length by about the same in breadth. There are only a few hills of insignificant elevation in the NE.; but along a part of the coast is a succession of sandy downs (*dunes*), which, not having been fixed by any artificial method, are gradually extending themselves, and have quite buried the old village of Escoublac. On various parts of the shore, as at Guerande, the sea has receded to a considerable extent. The isles of Noir-Moutiers and Bacin belong to this dép. It is estimated that about 321,600 hectares are arable, and 105,062 in pasture; that vineyards occupy 29,346 hectares, orchards 10,984 hectares, woods 33,075 hectares, and heaths, wastes, &c., 129,352 hect., or nearly one-fifth part of the entire surface. The country, on the S. bank of the Loire, is much superior in fertility to that on the N., and it is nearly all under culture; but agriculture is everywhere in the most backward state. There are a great number of little proprietors, many of whom engage themselves as labourers on the larger farms, who hold from one to ten acres of land, farmed by their families. Very few properties yield a rental of 6,000 francs (1,500*l.* a year). The largest farms seldom extend beyond 300 acres, the greater number varying from 160 to 200. Leases generally run from three to five and seven years, seldom beyond the latter term. Few farms are let for a money rent. Some farmers pay a stipulated quantity of grain for the arable, and money for the pasture land; but the far greater number hold on the métayer principle, paying half the gross produce to the proprietor. The usual wages of farm labourers vary from 7½*d.* to 9½*d.* a day: women get from 4*d.* to 7½*d.* During harvest wages are about half as much higher. Little butchers' meat is consumed by the agricultural pop. Their food consists principally of bread, butter, or fat, cabbage soup, buckwheat, pancakes and potatoes. Paupers are very numerous in winter, and in the rural districts there is no adequate provision for their support. The occupiers are in general miserably lodged, frequently sleeping in the same apartment with their cattle. They are not in debt, but have no money; are strongly attached to routine practices, and move on without an effort to improve their condition. (Consular Report.)

The produce of corn is estimated at about 1,400,000 hectolitres a year, principally wheat, buckwheat, and rye; a good many turnips are raised as food for cattle and sheep. The produce of wine is estimated at 900,000 hectolitres, but the quality is inferior; about 300,000 hectolitres are consumed in the dép., the rest being principally converted into brandy. The annual produce of cider may be about 130,000 hectolitres. The pastures on the banks of the Loire are excellent, and feed great numbers of cattle. The cows are good milkers, and the vicinity of Nantes is famous for its butter. The sheep are estimated to amount to 239,000 head, producing 250,000 kilog. of wool. The horses, though not large, are strong and handsome. The forests, which abound with oaks,

Digitized by Google

feed a good many hogs. Bees are numerous, and the honey and wax of the dép. have a high reputation. The pilchard and herring fisheries are important, the former employs 3,000 fishermen on the water, and a great many women in salting and barrelling the pilchards on shore. The manufacture of salt, from the extensive salt-pans at Noirmoutiers, Guerande, and Croisic, employs about 7,000 hands, and furnishes produce worth above 900,000 fr. a year. Bog iron is plentiful, and is smelted in the arronds. of Ancenis and Châteaubriant. A tin mine is wrought at Piriac. Granite, coal, turf, porcelain, and clay are the other chief mineral products. There are two cannon foundries and several building docks in the dép., and manufactures of sail-cloth, rope, glass, porcelain, tiles, paper, and leather. The trade of this department centres almost entirely in Nantes (which see). It is divided into 5 arronds.; chief towns, Nantes, the cap., Châteaubriant, Ancenis, Paimbœuf, and Savenay.

LOIRET, a dép. of France, region centre, between lat. 45° 13′ and 46° 18′ N., and long. 3° 42′ and 4° 45′ E., having N. Eure-et-Loir, Seine-et-Oise, and Seine-et-Marne, E. Yonne, S. Nièvre, Cher, and Loir-et-Cher, W. the last-named dép. Area, 677,119 hectares. Pop. 352,757 in 1861. Surface, for the most part, level; but in the N. is a chain of hills separating the basins of the Loire and the Seine. The Loire traverses the S. half of the dép., generally in a W. direction. It receives the Loiret, which rises within the dép., and joins the Loire after a short course; being, however, navigable for boats nearly to its source. S. of the Loire, the country is marshy, uncultivated, and infertile; but, in other parts, it is very productive, particularly in the W. districts. The arable lands comprise 394,590 hectares, meadows 24,464 ditto, vineyards 39,882 ditto, and forests 99,474 ditto. Agriculture is in a comparatively forward state. The corn grown, which is chiefly oats and wheat, exceeds the quantity required for home consumption. The annual produce of wine is estimated at 1,200,000 hectolitres; two-thirds of which is exported, under the name of *vins d'Orléans*, and the rest consumed at home, or converted into brandy or vinegar. None of the wine is of a superior quality, but the better sorts are esteemed as *vins ordinaires*. Cider is made in the arrond. of Montargis. Various fruits, with flax, hemp, and saffron, are grown; and of late the culture of beet-root for sugar has gained ground. The different branches of rural industry are all pursued by the same individuals who simultaneously grow corn, garden produce, and wine; and rear cattle, sheep, and poultry. It is estimated that there are in the dép. 100,000 head of black cattle, and 400,000 sheep. The latter have been improved by crossing with English breeds. Property is less divided than in the neighbouring departments, and there are many large estates. The manufacture of coarse broad cloths and other woollen fabrics employ a large number of hands; and Orleans has manufactures of fine cloth, flannels, and woollen yarn. Cotton yarn, vinegar, white lead, paper, parchment, and earthenware are also produced; and there are numerous distilleries. Meung is celebrated for its leather; Montargis and Pithiviers are the chief seats of the French saffron trade; and the latter town is celebrated for its *gâteaux d'amandes* and *patés d'alouettes*. The dép. is divided into 4 arronds.: chief towns, Orleans, Gien, Montargis, and Pithiviers.

LOKEREN, a town of Belgium, prov. E. Flanders, cap. canton, on the Deurne, and on the railway from Ghent to Antwerp, 12 m. ENE. Ghent. Pop. 18,125 in 1860. The place looks like a large, quiet, Flemish village. It is celebrated for its linen fabrics, and has also manufactures of cotton goods, flannels, lace, hats, and soap, with cotton printing establishments, bleaching grounds, breweries, distilleries, and oil mills. It has large weekly markets, and a considerable trade in its native products, and those of the adjacent country.

LOMBOK, an island of the Eastern Archipelago, between lat. 8° and 9° N., and long. 116° and 117° E., separated on the W. from Bali by the strait of Lombok, and on the E. from Sumbawa by the strait of Allas, the last being the most commodious passage through the Sunda chain of islands.

Lombok is of a rhomboidal shape; its length may be estimated at 53 m.; average breadth, 45 m. Area, probably 2,400 sq. m. A mountain chain covered with forests, runs W. to E. through the S. portion of the island; and an isolated height, the peak of Lombok, rises in the N. to 8,000 ft. above the sea. Several rivers disembogue on the N., E., and W. coasts. The country is populous, fertile, and well cultivated. Rice is raised by artificial irrigation, as in the Carnatic; and abundant supplies of bullocks, hogs, poultry and vegetables may be obtained at the port of Ampannan, on the W. coast. The inhab. are Mohammedans, and more civilised than the E. islanders in general. They carry on a considerable trade with Java, Borneo, and other Malay islands. Lombok and Mataram are the chief towns; the last is the residence of the rajah, who is tributary to the sultan of Bali.

LOMOND (BEN), a mountain of Scotland, which attains to an elevation of 3,195 ft. above the level of the sea. From its vicinity to Glasgow, from which it is distant NW. 27 m., and its position between Lochs Lomond and Katrine, it is by far the best known and most frequently visited of any of the highland mountains. Its summit, which is composed of micaceous slate, mixed with quartz, commands a great extent of view. The whole extent of Loch Lomond, with its wooded isles, appears just beneath. Loch Long, Loch Katrine, Loch Earn, and the river Clyde, form the principal waters. The mountains of Arran appear very distinct; and to the N. alps upon alps fill up the view.

LOMOND (LOCH), a lake of Scotland, between the cos. of Stirling and Dumbarton, its most southerly extremity being 6½ m. N. from the town of Dumbarton. This, which is the largest of the Scotch, and, indeed, of the British lakes, is a noble sheet of water, of a triangular shape, about 24 m. in length NNW. and SSE., and where broadest, along its S. shores, it is from 7 to 8 m. across; but its upper portion, from Rowerdinnan Inn, N. to Ardleesh, is comparatively narrow, being only about 1 m. in breadth. Its area is estimated at about 25,000 acres: its general depth is about 20 fathoms; but, in some places, it has a depth of 80, and even of 120 fathoms. It is studded with numerous islands, some of which are of considerable size and finely wooded. The scenery of the lake is varied and magnificent. Its N. extremity stretches into a wild, rugged, and dreary country. On the E. side Ben Lomond, one of the most stupendous of the Grampian mountains, rises from its margin; but, on descending the lake, the character of the scenery changes; the mountains become less precipitous; the glens between them are well wooded, and filled with gentlemen's seats; and on the S. it is bounded by a low, rich, fertile, and well cultivated country. Its surface level is from 3 to 5 ft. higher in winter than in summer; and it is generally about 22 ft. above the sea level. It

Digitized by Google

receives several streams, of which the Endrick, which flows into its SE. corner, is the most considerable. Its surplus waters are conveyed away by the river Leven, which, issuing from its S. extremity, falls into the Frith of Clyde, close to Dumbarton. In summer it is much resorted to by tourists, and a steamer is established on the lake for their accommodation. The waters of this lake were violently agitated at the period of the great earthquake which destroyed Lisbon in 1755.

LONATO, a town of North Italy, prov. Brescia, cap. distr. on the summit of a hill, 13 m. ESE. Brescia. Pop. 6,730 in 1862. The town is walled and defended by a castle, has four churches, a hospital, cavalry barracks, and manufactures of silk twist and saltpetre.

LONDERZEEL, a town of Belgium, prov. S. Brabant, 11 m. NW. Brussels, on the railway between Mechlin and Ghent. Pop. 4,725 in 1864. The town has several large tanneries, breweries, and distilleries, the latter producing gin, which is exported in considerable quantities.

LONDON (Lat. *Londinium*, Fr. *Londres*), the metropolis of the U. Kingdom of Great Britain and Ireland, and the most populous, wealthy, and commercial city of the world. It is situated partly and principally on the N. bank of the Thames, in the co. of Middlesex, and partly on its S. bank, in the co. of Surrey, about 45 m. above the river's mouth at the Nore, and 15 below the highest tideway. The site on the N. side is high and dry, but on the S. it is so low as to be under the level of the highest tides; though, by a well constructed system of drainage, it is kept perfectly free from wet. The subsoil is a hard clay, known to geologists by the name of London clay, lying in the middle of the great chalk basin, extending from Berkshire to the E. coast. In several places the clay is covered by thick beds of gravel. Exclusive of the city of London, properly so called, the metropolis comprises the city of Westminster, the bors. of Tower Hamlets, Southwark, Lambeth, and Marylebone, and other contiguous districts, which, though formerly distinct, are now combined into one vast mass of houses.

The limits of 'the metropolis' have been defined from time to time in acts of parliament and by various authorities for certain specified purposes. One of the earliest examples of such a district was that first included within the weekly bills of mortality, or weekly reports of the parish clerks relative to christenings and burials, established about the year 1592–3, in consequence of the prevalence of the plague in London. Additional parishes figured from time to time in the bills, but subsequently to 1726 no actual addition was made to the area which they embraced. The parishes of Marylebone, St. Pancras, Paddington, Chelsea, and Kensington were not within the bills, but the census commissioners considered it proper to include them within the 'metropolis' in the census abstracts 1801 to 1831. To this area several additions were made by the registrar-general on the establishment of the new weekly tables of mortality in London in 1840, bringing in the parishes of Camberwell, Bow, Hammersmith, Fulham, and others, together with the parishes comprised in the Greenwich Union. A further addition was made in 1844 of the parishes in the Wandsworth and Clapham Union; and, three years later, were added those in the Lewisham Union and the parish of Hampstead. During the last twenty years these limits have remained unaltered.

The subjoined tabular statement gives the population of London for the last seven decennial censuses:—

Date of each Census	Population	Increase between each Census	Decennial Rate of Increase (per Cent.)
1801	958,863		
		179,952	18
1811	1,138,815		
		240,132	21
1821	1,378,947		
		276,047	20
1831	1,654,994		
		293,375	17
1841	1,948,369		
		413,867	21
1851	2,362,236		
		441,753	19
1861	2,803,989		
Increase in 60 Years		1,845,126	193

According to the census returns of 1861, the birthplaces of the population of London were as follows:—

Where born	Of the 2,803,989 Inhabitants of London the Number born in the several Groups of Counties and elsewhere	Of 100 Inhabitants of London the Proportion born in the several Groups of Counties and elsewhere
1. London	1,741,177	62·096
2. South-eastern Counties	222,319	7·929
3. South-midland ,,	147,132	5·247
4. Eastern ,,	156,592	5·585
5. South-western ,,	128,442	4·581
6. West-midland ,,	76,700	2·735
7. North-midland ,,	34,101	1·216
8. North-western ,,	23,262	·830
9. Yorkshire	26,732	·953
10. Northern Counties	18,044	·644
11. Monmouthshire and Wales	19,670	·701
Scotland	35,733	1·274
Islands in the British Seas	3,429	·122
Ireland	106,877	3·812
British Colonies	15,389	·549
Foreign Countries	47,419	1·691
Born at Sea	971	·035

The preceding table may correct some popular errors. Thus it will be noticed that the tendency of the Scotch to go to London is less than the tendency of the people of any other parts of Great Britain, except Lancashire and Cheshire. Taking 1,000 as the population basis, there are to 1,000 people in Scotland nearly 12 Scotchmen in London, to 1,000 people in Yorkshire 13 Yorkshiremen in London, to 1,000 people in Wales and Monmouthshire 15 of Welsh birth in London, to 1,000 people in the Northern counties 16 Northern men by birth in London.

London is the metropolis of the empire, and thither the representatives of other nations, of the colonies, and of Scotland and Ireland, resort; but it is chiefly the field in which the populations of the several counties of England find scope for their talents and their industry. The majority of its inhabitants are, it is true, indigenous, for 1,741,177 were born within its limits; but of the 1,062,812 who were born elsewhere 852,994 were born in the extra-metropolitan counties and parts of counties of England and Wales. 62 in 100 of the inhabitants were born in London, 19 in the counties of the three divisions around London, 7 in the South-western and the West Midland Counties, 4 in the North Midland and all the Northern Counties. In 100 inhabitants little more than 1¼ were natives of Scotland, nearly 4 (3·8) were natives of Ireland, ·5 were natives of British colonies, 1·7 were natives of Foreign countries.

From the counties between the Wash and the

Digitized by Google

Humber there is a small but constant stream of emigrants to London; for Lincoln, Leicester, Derby, and Nottingham have to 1,000 inhabitants 26 of their natives in London; while the counties around the Severn have the somewhat larger proportion of 31 natives in London to 1,000 inhabitants. The stream to London from the south grows larger, and the counties of Cornwall, Devon, Somerset, Dorset, and Wilts send 128,442 of their natives to be enumerated in London,—70 natives to every 1,000 of the inhabitants of these South-western counties. The influx of the inhabitants of counties immediately about London rises to still higher proportions, and to 1,000 inhabitants the South Midland counties had 114 natives, the South-eastern counties 123 natives, the Eastern counties 133 natives resident in London. Proximity to the metropolis, and the absence of manufactures at home, first drew the natives of these counties to London, and the migration continues to flow thither in unabated force. Labourers, artisans of various kinds, and the professional classes, go to London probably in less unequal proportions from the various counties.

London is of great antiquity. It is said by Tacitus to have been in the days of Nero, '*copiâ negotiatorum et commeatuum maximè celebre.*' (Annal. lib. xiv. § 33.) It suffered severely in the revolt of Boadicea, but it speedily recovered from that disaster, and has always been the largest and most important of British towns. It is mainly indebted for its early and long-continued prosperity to its admirable situation. Though 45 m. from the sea, it enjoys, owing to its position on a great navigable river, all the advantages of an excellent sea-port, vessels of 2,000 tons burden coming up to London Bridge. Had it been built lower down, it would have been less healthy and more exposed to hostile attacks; and had it been higher up, it would have been deprived of the inestimable advantage of a deep-water harbour.

The Romans surrounded London with walls. It is probable that its limits were then commensurate with the part of the city said to be 'within the walls,' reaching from the end of Leadenhall Street to the top of Ludgate Hill, and from the Thames to London Wall and Little Britain. The wall appears to have inclosed it along the water as well as on the land sides. The great Roman roads, called Watling Street and Ermin Street, as well as the *viæ vicinales*, centred in London.

The continued and rapid increase of buildings renders it difficult to ascertain the extent of the metropolis at any particular period. If included in those parts is only the area presenting a solid mass of houses, its length, from E. to W., may be taken at 7 m., and its breadth, from N. to S., at about 5 m. The extent of surface covered by buildings is estimated at about 20 sq. m., so that M. Say, the celebrated French economist, did not really indulge in hyperbole when he said, '*Londres n'est plus une ville: c'est une province couverte de maisons!*'

Notwithstanding its immense size, it is not difficult for strangers to make their way in London. The Thames runs through it lengthwise from W. to E., and most of the great lines of streets are parallel to the river, being intersected at variable distances by lines of cross streets, or of streets running N. and S. Of the former, or of the longitudinal streets parallel to the river, there are two principal lines. The most northerly of these enters London on the W. by the Bayswater Road, passing in front of the fine terraces facing the N. side of Hyde Park. It then runs along Oxford Street, about 1¾ m. in length, till, after passing the S. or lower end of Tottenham Court Road, it unites with and is prolonged by Holborn, a wide and handsome street about 1 m. in length; whence it proceeds through Skinner Street and Newgate Street, till it reaches Cheapside, one of the greatest thoroughfares in the city, adorned at its western limit by a statue of Sir Robert Peel. The road next passes through the Poultry, having the Bank and the Exchange on the one hand, and the Mansion House on the other, along Cornhill to Leadenhall Street; from which it is continued by Whitechapel and the Mile End Road, into the country. Its entire length, from Hyde Park to the Regent's Canal, Mile End, is above 6 m.

The other great longitudinal street, to the S. of that now traced, enters London on the W. after passing through Kensington. This is by far the finest of the avenues to the metropolis. On the left Kensington Gardens appear like an ornamental forest; Hyde Park gradually rises to the splendid terraces on the N., and is bordered on the E. by magnificent houses, or rather palaces; and on entering Piccadilly is the handsome approach to Hyde Park and the W. front of Apsley House, formerly the residence of the great Duke of Wellington. On the right are the bold arch and gate leading to Buckingham Palace, surmounted by the statue of the 'Iron Duke;' the Green Park apparently stretching to the towers of Westminster Abbey; and a long line of splendid buildings, with the Norwood Hills in the distance. The promise of a magnificent city is not belied by an advance through Piccadilly. This, which is the first of the London streets traversed by the traveller from the W., is 1 m. in length, and is principally built only on the N. side, the other being open to the Green Park. It contains many splendid private residences and shops. On reaching the E. end of Piccadilly, the continuous line of street divides into two main lines: one of these runs on through Coventry Street, Leicester Square, Long Acre, and Great Queen Street, till it unites with Holborn: the other line deflects to the right through the Haymarket, whence it proceeds to the E. along the line of E. Pall Mall, through Trafalgar Square, and past St. Martin's Church, till it unites with the Strand. This, though formerly in many places narrow and encumbered, is now a magnificent street: it follows pretty closely the line of the river, from which it is not far distant; and besides two churches in its centre, and the imposing front of the South Eastern railway station at Charing Cross, has Exeter Hall on its N., and Somerset House on its S. side. Contiguous to the latter is Wellington Street, leading to Waterloo Bridge. The Strand terminates at the ancient gate of Temple Bar, the boundary of the city on the W. The great line of street is thence prolonged through Fleet Street, at the E. end of which, on the right, is a fine street leading to Blackfriars Bridge; and on the left Farringdon Street, one of the widest in the city, which is prolonged by the new Victoria Road to Islington. From Fleet Street the line continues up Ludgate Hill—much disfigured recently by the viaduct of the London, Chatham, and Dover railway, heavy and ugly as all railway architecture—till it reaches St. Paul's, the noblest edifice in the kingdom.

At the E. end of St. Paul's Churchyard, the wider channel of communication joins in Cheapside the grand northern line already traced, coming from Oxford Street and Holborn; but another branch of the former line runs nearer the river, through Cannon Street, full of warehouses of immense height, Eastcheap, and Tower Street, to the wide area of Tower Hill, whence it may be traced either in a straight line through Ratcliffe

Digitized by Google

Highway, N. of the London Docks, or close by the river along Wapping and Shadwell, where the lines again form a single street leading to the W. India Docks. The streets E. of the Tower are narrow, and lined with mean houses, mostly occupied by persons connected with shipping. This line is altogether about 6 m. in length.

Another line of street which unites with that last described, may be considered as beginning at Vauxhall Bridge, close to which is an open quay, ½ m. in length, commanding a view of the river and of the archiepiscopal palace of Lambeth. The line of road is, however, soon separated from the river by ranges of buildings, along which it passes, till it reaches Abingdon Street. At the termination of the latter it runs on, having Westminster Abbey on the left, and the Houses of Parliament with Westminster Hall and Bridge on the right: after leaving these, it connects with Parliament Street, and then with the spacious street called Whitehall, in which are the Treasury, Horse Guards and Admiralty, separating it from St. James's Park on the left, and the Banqueting Hall, with other handsome mansions shutting out the view of the river. The magnificence of the buildings in this short line of street is unequalled, except by those at the W. entrance of Piccadilly, and by the terraces of the Regent's Park. Beyond Whitehall is Charing Cross and Trafalgar Square, with the Nelson monument in its centre, and the National Gallery on its NW. side. Here the line, bending E. with the river, unites with the Strand, already noticed.

Among the principal streets running from N. to S., the first and most westerly is the Edgeware Road, with its continuations, Park Lane, Grosvenor Place, and Vauxhall Bridge Road. The second street, proceeding eastward, is the line formed of Portland Place, Regent Street, and Waterloo Place, extending between the Regent's and St. James's Parks, and forming one of the most splendid public thoroughfares in London, as well from the width of road as from the grandeur of the houses and shops on either side. At its S. termination is a granite column, surmounted by a bronze statue of the Duke of York, brother to George IV., while close to it is the 'Guards Memorial,' by John Bell, in commemoration of the Crimean campaign. A little N. of Piccadilly the line curves through the Quadrant, a handsome range of buildings. From this point it continues northward to Oxford Street, where it expands into a circus, and then, resuming its former dimensions, proceeds to the church in Langham Place: here, by a slight curve westwards, it opens into Portland Place, a wide and well built street, formerly a favourite residence of the foreign ambassadors, but latterly declining in the scale of fashion. Park Crescent and Park Square, opening into the Regent's Park, form an appropriate completion to the whole. The third great N. and S. line is a continuation southwards of the road from Hampstead: it passes along Tottenham Court Road to the E. end of Oxford Street, from which point its course may be traced through narrow streets down St. Martin's Lane to Charing Cross: but though a busy, it is an intricate thoroughfare, and is devoid of architectural interest. The other principal N. and S. lines consist of Gray's Inn Lane and Chancery Lane; Goswell Street and Aldersgate Street; and the line of street commencing at the Regent's Canal on the N., successively called Kingsland Road, Shoreditch, Norton Folgate, Bishopsgate Street, and Gracechurch Street: at the S. termination of the latter this line passes over London Bridge, and is thence prolonged across the Borough as far as Kennington Church in Surrey: its length is about 4 m., which may be considered the breadth of London in this quarter. The portion of this line at and near London Bridge affords some of the finest points for viewing London and the scenery on the river. Exclusive of the above, there are an infinite number of cross streets, some of which are of great importance. Among others, there is a spacious road from Finsbury Square through Moorgate Street, Princes Street, and King William Street, to London Bridge.

In addition to the various routes intercepting each other in different directions, a broad line of road embraces the greater part of London on the N., in a manner not unlike that in which the Boulevards encircle Paris. It commences in the Uxbridge Road, and has a NE. course as far as King's Cross, St. Pancras, where, turning eastward, it ascends Pentonville Hill, and entering the City Road, terminates in Finsbury Square. Underneath this road lies the Metropolitan, or Underground railway.

In Southwark, the great roads from the different bridges unite at the old posting house called the Elephant and Castle. They are generally wide and well-built streets, though, with the exception of Blackfriars Road, inferior to the principal thoroughfares N. of the river. A line of street, extending from Westminster Road to the Borough, connects these several roads with each other.

Unlike Edinburgh and many other great towns, the houses in London are not, with the exception of those in the Temple and Inns of Court, divided into stories, or so-called 'flats,' but in the vast majority of instances belong to or are hired by one individual, by whom, however, portions of them are frequently let to lodgers. They have usually a story sunk below the level of the street, comprising the kitchen and other offices, above which are usually 3 or 4, or more stories. The smaller and by far the most numerous class of houses have narrow fronts, containing one room or shop in the front of the street floor, and that immediately above it, the stair and a smaller apartment occupying the back part; the two upper floors are frequently divided into smaller apartments. Every house has the advantage of having an abundant supply of water; and in all the better class of houses it is supplied to the top as well as to the under story. The refuse water and drainage of every house is conveyed by a covered drain to the sewer, or grand receptacle in the centre of the street, sunk below the line of the lateral drains. Most houses have cellars opposite to them under the street for the stowage of coal, and such like articles. No filth is ever laid down upon the streets, which have universally flagged foot-paths along each side; and notwithstanding the concourse of horses, and the grinding of the pavement by carriages, the streets are, speaking generally, extremely well kept.

Until a comparatively late period the external appearance of the houses of London was little in harmony with the wealth of their occupiers and the richness of their interiors. Internal comfort was long the only, as it still is the chief, object of the Londoner. Provided his house were clean, commodious, and well and handsomely furnished, he cared little about its outside. Hence it was that the interminable rows of dull-looking brick houses, erected with little or no regard to uniformity, led strangers to remark that the best streets resembled long walls pierced with holes for doors and windows. Even Bond Street was said, in 1810, by an intelligent foreigner, to be 'an ugly inconvenient street, the attractions of which it is difficult to understand.' But the same

Digitized by Google

author (*Simond*) adds—'You cannot pass the threshold without being struck with the look of order and neatness of the interior. Instead of the abominable filth of the common entrance and common stairs of a French house, here you step from the very street on a neat floorcloth or carpet, the wall painted or papered, a lamp in its glass ball hanging from the ceiling, and every apartment in the same style. All is neat, compact, and independent.'

With the exception, indeed, of St. Paul's, Westminster Abbey, Somerset House, and a few more churches and public buildings, London displayed, till within the last 40 or 50 years, little architectural elegance. In more recent times, however, the erection of magnificent ranges of buildings, in every direction, has made the British metropolis as superior to most capitals in appearance, as it has long been in wealth, cleanliness, and comfort. The line of Regent Street has been already mentioned, to which may be added the Regent's Park, 'affording a landscape bounded by hills, and more than half surrounded by a large circuit of buildings, worthy the capital of the world. Belgrave and Eaton Squares, and the adjoining streets and squares on the estate of the Marquis of Westminster, with the terraces in Carlton Gardens, have all been raised within the last half a century, and are probably unequalled for symmetry and magnificence. Within a still shorter space a splendid city has been built on the elevated ground on the north and west side of Hyde Park, and Kensington Gardens; and another a little further northwards, on ground commonly designated as 'Tyburnia.' These, and a vast number of other streets and blocks of houses, in the town as well as the outlying suburbs, render the W. end of London a residence worthy the wealthiest aristocracy in the world. But the improvements effected of late years in the city, or oldest part of the town, have been equally great and striking. The new streets that lead from the Bank to London Bridge on the one hand, and to Moorfields on the other, as well as the noble thoroughfare known as Cannon Street, are on a grand scale; and when it is borne in mind that the ground which they traverse was previously occupied by a dense mass of houses which had to be purchased at a high price, it will be seen that they do as much credit to the public spirit as to the taste of the citizens. A number of new bridges over the Thames forms no small addition to the improvements of the last fifty years.

The houses of London, with very few exceptions, are built of brick. But within the last few years those in the principal streets have been mostly plastered or stuccoed over, and their fronts made to imitate freestone. This method of 'dressing up' houses has contributed, as some think, materially to the improved appearance of the town. The cheapness of 'stucco,' however, allows it to be applied to the inferior class of houses, where the elaborateness of ornament that could not be executed in stone at many times the cost, seems rather out of place, and not altogether in good taste. But the insides, as well as the outsides, of the houses have been greatly improved within the last 30 or 40 years; those now and lately built being far more conveniently constructed than formerly, and better suited to the accommodation, the comfort, and the health of their inmates.

It is frequently both a difficult and a dangerous matter to get across a crowded street, or one much frequented by carriages. This difficulty has, however, been in some parts lessened by constructing raised landing-places in the middle of the streets, protected by pillars and lamps, to which passengers may resort. But though these conveniences do not cause any sensible obstruction to carriages, their supply is scanty in the extreme; there not being, in fact, one where there should be ten. A better method still for obviating the dangers of the 'crossings' would be subterranean footpaths at the most crowded spots, which might be made at a small expense—or, at any rate, an expense less than commensurate with the importance of the subject. It appears from official returns that the number of people killed in the streets of London by 'accidents,' from the 12th of March, 1864, to the 1st of April, 1865, amounted to 233. Considering that the number of people killed by railway 'accidents' in the United Kingdom amounts to but 25 per annum on the average, there is something frightful in this slaughter of the streets of London.

Parliamentary and other Divisions.—The most popular division of London is into three parts: the City, the West End, and the Borough; Temple Bar dividing the city from the west end, and the river separating both these portions from the Borough. This division is necessarily vague, and, for specific purposes, different divisions are made. The city of London is situated nearly in the centre of the metropolis, and is the seat of commerce on the largest scale. The city of Westminster, W. of the city of London, contains the royal palaces, the houses of parl., the law courts, most of the public offices, and the town residences of nearly all the nobility and aristocracy. The cities of London and Westminster, however, do not comprise above a tenth part of the area, or a sixth part of the pop. of the whole of the metropolis. For parliamentary elections, the metropolis is divided into 7 districts: the cities of London and Westminster; the borough of Finsbury, N. of the city of London; the Tower Hamlets, E. of Finsbury and the city; Marylebone, N. of the city of Westminster; and 2 districts S. of the river, Southwark on the E., and Lambeth on the W. side.

The area of the city of London, which comprises only a small portion of the metropolis, is estimated at about 570 acres. Its boundary line, leaving the Thames at Temple Lane, passes northwards, crossing Fleet Street at Temple Bar, and Holborn at 'Holborn Bars.' Turning eastward, it thence takes an undulating course, inclosing Smithfield, Finsbury Circus, and Bishopsgate Street S. of Spittal Square. It thence passes SE. through Petticoat Lane to Aldgate, from which point the boundary, pursuing a SSW. course, reaches the Thames by a very irregular line, excluding the Tower. The city is divided into 108 parishes, of which 97 are said to be 'within,' and 11 'without' the walls. This division is now merely nominal, the ancient city boundary having long disappeared, although the city gates, where the walls passed the great thoroughfares, were standing in the last half of the 18th century.

The E. boundary of the city of Westminster coincides with the W. boundary of London at the Thames and Temple; it thence runs NW. to the junction of Tottenham Court Road and Oxford Street. The latter street constitutes the whole N. boundary as far as the W. extremity at Kensington Gardens. From this point a very irregular line, running to Chelsea Hospital, forms the W. boundary. It then turns to the SW. along the Serpentine river, on leaving which it goes S. until it reaches the Thames near Chelsea Hospital.

The five metropolitan boroughs are only parliamentary, and not municipal, divisions, Maryle-

Digitized by Google

bone includes the three parishes of Marylebone, Paddington, and St. Pancras; Finsbury comprises nine parishes, and the Rolls' Liberty; and the Tower Hamlets includes fifteen; Southwark embraces not only the municipal borough, but the parishes of Bermondsey and Rotherhithe; and Lambeth comprises Camberwell and Newington, as well as the parish of its own name.

At the general election of 1865, the seven parliamentary divisions of the metropolis had 137,777 electors, who returned sixteen members. The city, returning four members, had 17,593 electors; Westminster, returning two members, had 13,522 electors; Marylebone, returning two members, had 24,210 electors; Finsbury, returning two members, had 24,106 electors; the Tower Hamlets, returning two members, had 31,251 electors; Southwark, returning two members, had 12,058 electors; and, finally, Lambeth, returning two members, had 25,037 electors inscribed on the rolls.

Parks and Squares.—The W. end of the town is beautified and rendered healthy by four extensive parks, appropriately called the lungs of London. They are open to the public; and, though each has a different character, they all afford ample scope for recreation and exercise. Hyde Park (once the manor of Hyde, and belonging to the Abbey of Westminster), lying W. of Piccadilly and Oxford Street, and between the roads leading therefrom, contains about 400 acres, and has a large and deep artificial lake, crossed by a handsome bridge of five arches. This lake, which is slightly bent, is, by an absurd misnomer, called the Serpentine river. The whole of this park was, till within recent years, an open field, dotted with trees, and traversed by carriage ways It is now laid out, in parts, as a garden, with well-kept flower beds, ornamental walks, statues, and fountains. The whole of the grounds, as well as Kensington Gardens, lying W. of Hyde Park, and separated from it by a trench and wall, are open to the public. St. James's Park, between the Horse Guards and Buckingham Palace, is less than a fourth part of Hyde Park, and not so open; its site being low, damp, and marshy. Within recent years, however, the central part has been tastefully laid out, and what was a dirty straight canal, running through a marsh, has been converted into a varied sheet of water, interspersed with islands affording a secure retreat to numerous aquatic birds, and surrounded by lawns, shrubberies, and trees. The avenues on the N. side of this park are open to all pedestrians, but only to the horses and carriages of some privileged members of the aristocracy. The S. drive is open to all private and hackney carriages. The Green Park, a triangular piece of ground, about as large as St. James's, from which it gradually rises to Piccadilly, is open, well aired, and forms a sort of miniature Hyde Park. Along its E. margin are some of the most splendid houses in the metropolis, incl. those of Earl Spencer, the Duke of Sutherland, and the Earl of Ellesmere. The latter, in the Palladian style, is a noble palace, and one of the most magnificent private residences in London.

The Regent's Park, which is nearly as large as Hyde Park, with an equally varied surface, was formed during the regency, in the latter years of the reign of George III. It is sit. N. of Portland Place, on high ground, surrounded by elegant buildings. But it has a clay subsoil, and is rather damp, although being tolerably well drained. Neither is it, like most of the other parks, a place wholly appropriated to the accommodation and recreation of the public; but, on the contrary, the public is shut out from a considerable portion of its extent, and some even of its finest parts have been let to private individuals who have built villas upon them. This cannot but be held a gross abuse of public property; and it is somewhat surprising that it should have been allowed to be perpetrated, almost without notice. The gardens of the Zoological Society are situated on the N. side of this park, and the central portion is occupied by the gardens of the Botanical Society.

A portion of the advantages so long enjoyed by the W. end of the town in the possession of its four parks, has been conferred, more recently, on the eastern and the south-western parts of the metropolis, where large open spaces, respectively called Victoria Park and Battersea Park, have been laid out in grass plots, and handsomely ornamented with fine trees, flower beds, fountains, and even artificial lakes. Victoria Park, comprising about 300 acres, is situated a little to the NE. of Bethnal Green; and Battersea Park, the only public park of London adjoining the river Thames, is W. of Lambeth, right opposite Chelsea Hospital. The cost of buying the land and making both these parks was borne by the government.

The squares of London are pretty numerous in all parts, but the largest and handsomest are in the W. end. In many the houses are on a grand scale, and the central gardens well laid out. Grosvenor, Berkeley, and Hanover Squares, which lie between Oxford Street and Piccadilly, were formerly, and still are, favourite resorts of the aristocracy. Belgrave Square, however, with the surrounding streets and squares, and Carlton Terrace are still more fashionable quarters. St. James's Square, between Piccadilly and Pall Mall, and Cavendish, Portman, and Manchester Squares, on the N. side of Oxford Street, are mostly occupied by persons of distinction. Further E. are Russell and Bedford Squares, and a cluster of squares to the N. of these, chiefly occupied by merchants and tradesmen. Lincoln's Inn Fields, S. of Holborn, is a large and well-built square, and its inclosure is more tastefully laid out than any other in this part of the metropolis. Finsbury Square lies N. of the city, and near it is Finsbury Circus. Other squares, formed of good houses, are to be found in all parts of the town and neighbourhood.

Statues and Public Monuments.—Several of the best squares are decorated with statues; among which may be remarked those of Charles II., William III., Anne, and George I. in Soho, St. James's, Queen's, and Leicester Squares; that of George I. in Grosvenor Square; of William, duke of Cumberland, in Cavendish Square; of Pitt, by Chantrey, in Hanover Square; of Fox, by Westmacott, in Bloomsbury Square; of the Duke of Bedford, by the same sculptor, in Russell Square; and of George IV., by Chantrey, in Trafalgar Square. Other statues and monuments are placed in different parts of the metropolis, among which are the equestrian statue of Charles I., by Le Soeur, at Charing Cross; of James II., by Gibbons, behind Whitehall; of Anne, by Bird, in front of St. Paul's; of George III., by Wyatt, Pall Mall; of the Duke of Kent, in Park Crescent; of William IV., in King William Street, city; of Canning, by Chantrey, in Palace Yard; of General Napier, by Behnes, at Charing Cross; of the Duke of Wellington, by Wyatt, over the grand arch at the junction of the street, at Hyde Park Corner, with the road leading by Constitution Hill to Buckingham Palace; and another statue of the duke, by Chantrey, opposite to the Bank of England in the city. At the bottom of Waterloo Place and the junction of Pall Mall, stands the 'Guards Memorial,' a monument in honour of the Guards who fell in the Crimean war; and near the E. entrance to Hyde Park is a statue copied from a figure at

Digitized by Google

Rome, said, but without any authority, to be that of Achilles. It is of brass, and was formed out of cannon captured by the Duke of Wellington, in whose honour it was erected, and to whom it is inscribed 'by the ladies of England.'

The Monument on Fish Street Hill, built in 1671–77, to commemorate the burning of London, is a fluted Doric column, 202 ft. in height, designed by Sir Christopher Wren. The pedestal is decorated by a representation, in relief, of the destruction of the city, sculptured by Cibber: at the top of the column is a gallery affording a view of the E. part of the metropolis, and on the summit is a blazing urn. The York Column is a plain Doric pillar of granite, surmounted by a bronze colossal statue of the Duke of York. The height of the column is 124 ft., and above the capital is an iron gallery, from which a good view is obtained of the W. end of the town. This column, erected in 1833, is situated on the N. side of St. James's Park, at the lower end of Waterloo Place. A fluted Corinthian column, with a capital of cast metal, has been erected in Trafalgar Square in honour of Nelson. It is surmounted by a statue in stone of the hero; and on its pedestal are some spirited sculptures in *alto relievo*, in bronze, representing his death, and some of the most striking events of his life. It is 176 ft. 6 in. high from the base to the top of the statue; but, on the whole, it has a poor effect, expressed by the wits in the saying that government here has 'mast-headed the admiral.'

Bridges.—The Thames, which, in its course through London, has a medium width of about 1,000 ft., is crossed by thirteen bridges, of which eight are devoted to the ordinary traffic, and five to railways. The oldest bridge over the Thames of which there is any record, was a wooden structure thrown across the river early in the 11th century; but the frequent and costly repairs indispensable for its maintenance led to the construction of one of more durable materials. A stone bridge, of pointed architecture, was completed in 1209, which, by means of occasional renovations, was kept standing till 1834. Down to the middle of last century, this was the only bridge between London and Southwark. The great inconvenience of a circuitous journey from the west end of the town to the city before the river could be crossed by carriages, induced parliament, in 1738, to make a grant for the erection of Westminster Bridge at the court-end of the metropolis. Old Blackfriars Bridge (intended by its projectors to have been called Pitt Bridge, in honour of the first great statesman of the name of Pitt), was built about 20 years after, the expense of its construction being defrayed by a toll exacted during 19 years. Westminster and Blackfriars Bridges were built of Portland stone, which, being too soft to resist the constant attrition of the water, and of the ice of winter, their piers were so much worn as to threaten their entire destruction; the former, therefore, had to be taken down in 1861, and the latter in 1865. The new bridge at Westminster, built after the designs of Mr. Page, was opened in 1863, and the new bridge at Blackfriars, likewise designed by Mr. Page, is to be completed in 1867. New Westminster Bridge, built at an expense of near 400,000*l.*, is generally considered the handsomest as well as most convenient bridge of the metropolis. It is quite level, and has two footways of 15 ft. width; two tramways for heavy traffic, each 7 ft. 6 in., and a roadway of 40 ft. for light traffic. The new bridge at Blackfriars, the estimated cost of which is 250,000*l.*, will be 9 ft. narrower than Westminster Bridge. Southwark Bridge, which was once held the most splendid structure of its kind, was completed in 1819. It is of iron, and has only three arches, the span of that in the centre being 240 ft., and the weight of metal in it 1,665 tons. Waterloo Bridge, which Canova said was 'worth a visit from the remotest corner of the earth,' is of granite, and has 9 elliptical arches, each 120 ft. in width. It was built by a joint stock company, at a cost of 1,150,000*l.*, and opened to the public in 1817. A toll of one half-penny is charged on this bridge for all foot passengers, and of 2*d.* for hackney carriages. London Bridge, like the Southwark and Waterloo Bridges, was planned by John Rennie. It is built of granite, the span of the centre arch being 150 ft., and is a noble specimen of bridge architecture. The heavy expense of this fabric, amounting to 2,000,000*l.* sterling, was partly defrayed by a duty on all coal brought into the pool, and partly from the revenues of property appropriated for the support of 'London Bridge.'

Of the five railway bridges that cross the river Thames within the metropolis, the best that can be said is that they are undoubtedly useful structures, built at a comparatively small cost. Two of these bridges belong to the South Eastern railway company—that at Charing Cross taking the site of a former suspension bridge, transferred to Clifton—while one accommodates the traffic of the London, Chatham, and Dover line; another that of the lines terminating at Victoria station, Pimlico; and the highest on the river, that of the South Western and Great Western railways.

The famous Thames Tunnel, which passes under the river between Wapping and Rotherhithe, effects a connection between its banks nearly 2 m. below London Bridge. The erection of a bridge in the centre of the port was of course impracticable, and the mode of uniting the two shores, without injury to the shipping interest, was long a difficult problem for engineers. It was at length solved by Sir I. Brunel, who designed and completed the tunnel. It consists of a hollow brick cylinder, or tube, subdivided into two road-ways, each 15 ft. high and 12 ft. broad. Notwithstanding the danger attending the execution of the work, owing to the perpetual oozing through and occasional bursting in of the river, the loss of life during the 15 years it occupied was very inconsiderable. But it has hitherto been a most unprofitable speculation, and will probably have to be turned into a railway tunnel. Projects to this effect have long been entertained, but the great difficulty in their execution has been the neighbourhood of the great docks, far too deep to allow the subterranean approach of railways.

Palaces and Houses of Parliament.—St. James's Palace at the west end of Pall Mall, is an irregular, mean-looking brick building, totally unworthy the name of palace: it was erected by Henry VIII., on the site of a hospital for female lepers, which existed in the 11th century. The interior, however, is handsomely fitted up, and it is well adapted for court levees and drawing-rooms, which are mostly held in it. The chapel attached to this edifice is that used for the ancient hospital.

Buckingham Palace, at the W. end of St. James's Park, occupies the site of Arlington House, pulled down by John Sheffield, duke of Buckingham, who erected in its stead a plain respectable mansion. Having been purchased by George III. in 1762, it became the favourite abode of Queen Charlotte. Under George IV., whose rage for building was as decided as his taste was equivocal, Buckingham House was entirely rebuilt; and became, in 1837, the town-residence of the Queen. Till recently the principal front to the E. consisted of three sides of a square, a marble arch (a minia-

Digitized by Google

ture imitation of that of Constantine at Rome) being a little in advance of its narrow projecting wings. But this arch, which did not harmonise with the rest of the building, and was, at the same time, mean and paltry, was removed in 1850. A new eastern front has, also, been given to the building, which is now quadrangular. This new portion is of great magnitude: and though, perhaps, some of its details may be objected to, it is, on the whole, an imposing structure. The apartments in it are more lofty than those in the other portions of the building, and are better fitted for state-display. The garden façade, an elevation of the Corinthian order on a rustic basement, is the best part of the palace built by George IV. The gallery, about 160 ft. in length, contains some good pictures. Except in the new front, the rooms in the basement story are low, and some of them, with the greater number of the corridors and passages, are badly lighted.

The situation of this palace is not favourable. It is closely hemmed in on the S. side by inferior houses; while, on the W. side, the grounds are overlooked by the tall houses in Grosvenor Place. Until the year 1865, the road in front of the palace, and along the Mall, not being paved, but covered with a compound of gravel and clay, became in wet weather a mere puddle.

The old Houses of Parliament stood upon ground formerly occupied by the palace of Westminster. Their appearance was far from imposing; but a certain degree of antiquated splendour, the associations connected with their history, and the importance of the purposes to which they were appropriated, made them respectable in the eyes of Englishmen. They were, however, wholly destroyed by fire on the 16th October, 1834. Preparations were made immediately after for the erection of a new edifice, on a scale infinitely larger and more sumptuous than the old one. The new palace, built after the designs, and under the direction of Mr. Barry, was not completed till the year 1864, so that its erection took thirty years. The expenditure in money was equivalent to that of time, for it cost above two millions sterling. The space occupied by the Houses of Parliament is about eight acres; the buildings have a river frontage of 900 ft., with a terrace of Aberdeen granite 680 ft. long by 30 ft. broad. The Victoria Tower, chiefly designed for correcting the low situation of the edifice, commanded, as it is, by Westminster Abbey, rises to the height of 340 ft. The clock, at the opposite, or eastern end, is 320 ft. high, and the central spire 300 ft. The royal entrance in the Victoria Tower is a majestic gateway, 65 ft. in height. The palace is altogether an edifice with the stamp of grandeur visibly impressed upon it, though adverse critics contend that it is overlaid with an endless profusion of minute ornaments, which detract from its simplicity, appear paltry, and catch soot and smoke, besides forming convenient receptacles for swallows' nests. The passages inside, being in the last degree complicated, are also more like the mazes in a labyrinth than the corridors in a palace. The House of Lords is as gorgeous as gilding and painting can make it; but the House of Commons has greater simplicity.

The Government Offices, including the Treasury, Home Office, and Board of Trade, on the W. side of Whitehall, have been much improved by the erection of a uniform and handsome palatial front. The Board of Control has an Ionic portico, but is, otherwise, a plain building. The Ordnance and Admiralty offices make no pretensions to display; and the 'Horse Guards,' which does pretend to it, is in very bad taste. Many of the public offices are in Somerset House, once a palace, occupied by Edward VI. and Elizabeth. The old building was taken down in 1775; and the present quadrangular structure, designed by Sir William Chambers, was completed in 1782, and distributed into government offices. The street front is only 200 ft. in length, but that facing the river is 800 ft. in length, and is one of the noblest elevations in London. An eastern wing was added by King's College, in 1830, in completion of the architect's design.

On the river's bank, in the E. part of the city, is *the Tower*,

'With many a foul and midnight murder fed.'

This rude fortress, about ¼ m. below London Bridge, was begun by William the Conqueror in 1078. The original building, now called the White Tower, was completed in 1098. Additions were made by Henry III. in 1240, by Edward IV. in 1465, and the whole was substantially repaired by Charles II. in 1663. The Grand Storehouse, a large building N. of the White Tower, begun by James II. and completed by William III., was burnt down in 1841, when about 280,000 stand of muskets and small arms were destroyed. On the site of this storehouse a large semi-Gothic structure, called the Wellington Barracks, and serving partly as such, and partly as an armoury, has been erected. It is fire-proof, and is constructed so that it could not easily be taken, unless artillery were employed against it. The tower was a royal palace during more than five centuries. It was long, and still in fact is, a state prison; and several royal personages and many nobles, and distinguished commoners, perished in this edifice, some by the hands of public executioners, and some by the dagger and bowl of the assassin. It anciently contained several detached masses of building, most of which have now disappeared. The original tower, now called the White Tower, still remains the principal edifice. The Martin Tower is now called the Jewel Tower. The Lantern Tower, the Royal Palace, and the Mint have been pulled down. Of the remainder of the old building vestiges may be traced under altered names. The present edifices consist, exclusive of the barracks already referred to, of the church of St. Peter, the ordnance office, the record office, the jewel office, and the armouries. The whole is surrounded by a moat filled with water from the Thames, and the outer bank has been turned into pleasure grounds. The Tower is open to visitors, who pay 6*d.* to see the armouries and a similar sum to inspect the regalia. The menagerie, formerly the best in England, having been superseded by that belonging to the Zoological Society in the Regent's Park, was dispersed many years ago. The *Mint*, formerly in the Tower, but now on Tower Hill, is a stone building of Greek architecture, consisting of a centre and wings. The workshops and offices occupy about 8,000 square yards, and the machinery for coining is complete and efficient.

Post Office.—The Post Office, in the centre of the metropolis, near St. Paul's, a large, handsome building, completed in 1829, of Portland stone, is 390 ft. in length, 130 ft. in width, and 64 ft. high. The façade has three Ionic porticoes, over the central and largest of which is a plain pediment. Within this portico is the great hall, 80 ft. by 64 ft., divided into three compartments by rows of Ionic columns on granite pedestals: passages lead from it to the principal offices.

The business transacted in this building, embracing, as it does, the internal correspondence of this immense city, and its external correspondence

Digitized by Google

with all parts of the U. Kingdom and of the world, is necessarily of vast extent; and is conducted with a degree of despatch, regularity, and accuracy, that is quite extraordinary. There are about 1,000 houses and pillar-boxes for receiving letters within what is called the 'town district' of the metropolis. The number of letters collected in this district alone amounted to 13 millions in 1839, the year preceding the general reduction of postage. In 1840, the first year of the penny post, the number of London district letters rose to 21 millions, while the total number of letters passing through the General Post Office was 132 millions. In 1860, the total number of letters amounted to 462 millions, and the local correspondence to 63 millions. Finally, in 1864, the total reached 471 millions, while the London district alone produced 70 millions of letters.

Religious Establishments and Buildings.—London is a bishop's see, the highest in rank in the kingdom under the archbishops. The diocese formerly comprised 199 parishes in Middlesex, 398 in Essex, 56 in Hertfordshire, and 4 in Buckinghamshire, in all 650; but under the new ecclesiastical arrangements it comprises all the parishes of Middlesex, 23 in Surrey, 10 in Essex, and 9 in Kent, making a total of 241 parishes, and 313 benefices. Westminster contains 10 parishes, 4 of which were formed early in the last century, in consequence of the great increase of pop. at the W. end of the town, and one more recently; 2 only of these parishes, St. Margaret's and St. John's, are considered to form the city of Westminster, the other 8 being denominated the liberties. Westminster was erected into a bishopric by Hen. VIII. in 1541, when the whole of Middlesex, exclusive of the city of London and the parish of Fulham, was assigned as its diocese; but this bishopric existed only nine years, at the expiration of which the ecclesiastical government reverted to its former channel.

St. Paul's, the cathedral church of London, is not only the great architectural glory of the metropolis, but of the empire. It stands in an elevated situation at the top of Ludgate Hill, on the site of the former cathedral, destroyed during the great fire of 1666. Its foundations were laid on the 21st of June, 1675; and Sir Christopher Wren, by whom it was designed, and under whose directions the works was carried on, lived to complete the stupendous edifice, the last stone of which was laid by his son in 1710. It is built in the form of a Latin Cross, with an additional arm or transept at the W. end to give breadth to the front, and has a semicircular projection at the E. end for the altar, and semicircular porticoes at either end of the transepts. It is 510 ft. in length, E. to W., the length of the cross, exclusive of the circular porticoes, is 250 ft., the breadth of the W. façade with the turrets 180 ft., and the height of the walls 110 ft. An immense dome, or cupola, rising over the centre, is surmounted by a lantern, ball, and cross, the latter being elevated 362 ft. above the level of the floor, and 370 ft. above the pavement of the churchyard. The two turrets, or belfries, in the W. front, are each 222 ft. in height. The walls are decorated by two stories of coupled pilasters arranged at regular distances, those below being of the Corinthian and those above of the Composite order. The whole building is of Portland stone; and the excellence of its foundations, and the massive solidity of its walls and piers, warrant the inference that it will be as lasting as it is magnificent.

St. Paul's, it is frequently said, is copied, or at least closely imitated, from St. Peter's at Rome; and to some extent this is true. But it is a copy that bears the impress of transcendent genius; and may be said to be to St. Peter's what the Æneid is to the Iliad and Odyssey. The fronts of both cathedrals are the parts, perhaps, in which they are most deficient; but, in neither instance, was the architect allowed to follow out his own conceptions. Bramante and Michael Angelo wished to have the portico of St. Peter's formed on the plan of the Pantheon, and Wren was obliged to modify his masterly designs so as to make them acceptable to those to whom he was obliged to defer. The belfries of St. Paul's give it a character very different from that of St. Peter's. Neither is the dome of the latter so spherical as that of the British cathedral, nor is it so striking a feature of the building, being placed so far behind the lofty façade as to be almost invisible to a person standing near the edifice. But in the vastness of its proportions St. Peter's as far exceeds St. Paul's as the latter does the largest of the English churches. Perhaps, also, it is superior to St. Paul's in the harmony of its parts; the dome, though so grand a feature in the latter, being, it is very generally admitted, too large for the other parts of the building. But the English cathedral is, though *longo intervallo*, second only to St. Peter's; and is unquestionably the noblest of transalpine and of Protestant temples.

The interior of St. Paul's is chaste and imposing; but, owing to the want of ornament, it has rather a naked and austere appearance. Within the last fifty years, it has been attempted to obviate this defect by placing within the cathedral monuments erected at the public expense to eminent individuals, among whom may be specified Marquis Cornwallis, Earl St. Vincent, Lord Nelson, Abercrombie, Earl Howe, Howard the Philanthropist, Dr. Johnson, Sir William Jones, Sir Joshua Reynolds, the Duke of Wellington, and others. But these, with few exceptions, do no credit either to the artist or the country, and are totally unworthy of the temple which they only encumber.

The remains of Sir Christopher Wren are deposited in one of the vaults of the cathedral; and before the entrance to the choir is the following appropriate inscription to his memory:—

SUBTUS. CONDITUR. HUJUS. ECCLESIÆ. ET. URBIS.
CONDITOR. CHRISTOPHORUS WREN. QUI. VIXIT.
ANNOS. ULTRA. NONAGINTA. NON. SIBI. SED.
BONO. PUBLICO. LECTOR. SI. MONUMENTUM. REQUIRIS.
CIRCUMSPICE.
OBIIT. XXV. FEB. ANNO. MDCCXXIII.
ÆTAT. 91.

Visitors ascend by an inside stair to the stone gallery which surrounds the exterior gallery above the colonnade; and, by a more difficult ascent, they reach the Golden Gallery, which crowns the apex of the dome, at the base of the lantern. The view from this latter point, on a clear day, is unrivalled. The entire metropolis, vast as it is, appears to be spread out at the spectator's feet. The broad and silvery line of the river, crossed by numerous bridges, and bearing on its bosom thousands of vessels, gives infinite grandeur and variety to the scene. At this height, the people, horses, and carriages in the streets, and everything else on the surface, appear so greatly diminished, that the bustle of the crowd has been, not inaptly, compared to that of a swarm of emmets. Owing to the usual density of the smoke, this splendid view is seldom seen in perfection. It appears to the greatest advantage early on a clear summer morning, before the fires are lighted. The more adventurous visitors not

Digitized by Google

only ascend to the top of the cupola, but enter the lantern, and thence make their way into the copper ball by which it is crowned. The diameter of the latter is 6 ft. 2 in.

The whole cost of this noble structure amounted to only 747,954*l.*, or less, less than a fourth part of the sum spent on the new Houses of Parliament. St. Paul's cathedral was finished in 35 years, under the superintendence of one architect, by one master mason (Mr. Strong), and during the incumbency of one bishop of London (Dr. Henry Compton). St. Peter's church at Rome, on the other hand, was 145 years in building, during which time no fewer than 12 architects were employed upon it, and 19 popes sat in the papal chair. (See Brayley's Account of St. Paul's, in the Survey of London and Middlesex, ii. 249–310; Aikin's Essay on St. Paul's; Britton's Account of St. Paul's; and Elmes's Life of Sir Christopher Wren.

It is to be regretted that St. Paul's is so much hemmed in by the surrounding buildings. The view of the grand façade, with the dome rising above it, from the foot of Ludgate Hill, was, previous to 1865, generally held the most favourable; but it was almost entirely destroyed by the ugly railway bridge of the London, Chatham and Dover line, which, in this year, was thrown across the street, at the very point where the noble edifice presented itself most strikingly. At present, the dome appears to best advantage from the bridges and the river; and is seen at a great distance from all parts of the surrounding country, towering above the smoke by which the city is generally enveloped. The effect of the smoke on the structure is not a little curious. In the parts protected from the weather it adheres, and the building has, in consequence, a black and sooty appearance; while, on the other hand, the parts exposed to the weather seem bleached or whitened.

Westminster Abbey, which, next to St. Paul's, is the noblest ecclesiastical edifice in London, dates from the 13th century, though portions of the edifice, erected by Edward the Confessor, may still form part of the building. Great additions, were made to it by Henry VII., who built the splendid chapel that still bears his name; and, at the beginning of the last century, the two towers of the W. front were added, from designs furnished by Sir Christopher Wren. In 1803 a considerable part of the building was destroyed by fire; but it has since been completely repaired, and Henry VIIth's chapel renovated in its original style. It is 360 ft. in length, and 195 wide, within the walls. Though built at many different times between the reigns of Henry III. and Henry VII., and never quite completed, it offers one of the best specimens of the pointed style in England. It is in the form of a cross, the shape of which, externally at least, at the E. end, is almost obliterated by 12 minor chapels, of which that of Henry VII. is the largest and finest. The great variety of the abbey renders any thing like a general description impossible. The N. side, with its beautiful gate, may be considered the principal front; but the view is much injured by the interference of St. Margaret's church, which immediately adjoins the abbey. It presents a line of ornamental turreted buttresses and pointed windows, with a fanciful sculptured porch, decorated with immense flying buttresses, lofty pinnacles, and a large wheel window 32 ft. in diameter. The most striking view of the interior is from the W. entrance, where the lofty pointed aisles, clustered columns, rich tracery work, and monumental decorations, judiciously lighted by painted windows, present a harmonious effect well calculated to arrest the attention of the most insensible. Many of the most illustrious of the statesmen, orators, warriors, philosophers, divines, and poets, of Great Britain, from Chaucer to Macaulay, and from Clarendon to Palmerston, are either buried or have their monuments within its precincts; and the statues and other memorials which are distributed all over the abbey, give it the highest interest, and deeply impress the mind. Since its restoration, in 1820, Henry VIIth's Chapel has formed the most beautiful of the subordinate portions of the abbey: it is universally considered a gem, and is, undoubtedly, a very choice specimen of its style.

The other churches of London have no pretensions to be compared with those last mentioned. Of those which escaped the great fire of 1666, St. Saviour's in the Borough and the Temple Church deserve special mention. The former, restored to much of its ancient freshness, is a good specimen of the architecture of the 14th century: the latter, which has also been restored recently, is still more ancient, and is remarkable for its peculiar architecture, and for the fine Norman arch forming the entrance to the building. After the fire, several churches were built by Sir Christopher Wren, but the fame of St. Paul's has obscured the lustre of his other works. Bow Church, in Cheapside, St. Bride's, Fleet Street, and St. Stephen's, Walbrook, are the most admired of Sir Christopher's churches. In the early part of last century several noble churches were erected, of which St. Martin's, St. George's, Hanover Square, and St. George's, Bloomsbury, are good specimens. Within the last 60 years, however, a complete change, and great deterioration, took place in our ecclesiastical architecture. St. Pancras Church and some others may, perhaps, be excepted from this censure; but an extreme poverty of architectural talent was shown in designing new churches, which are quite unworthy of those formerly erected and of the city. More recently, however, the taste has been again improved; though the Gothic or mediæval style is now, perhaps, too universally followed. The places of worship for dissenters are, with few exceptions, very plain brick buildings, well arranged for the accommodation of large congregations, but constructed with little attention to ornament or taste.

Lambeth Palace.—One of the most extensive and imposing buildings S. of the Thames is Lambeth Palace, on the river's bank, nearly opposite the new houses of parliament. The original building, erected in 1191, was first intended for a college of canons; but as the pope refused his consent to its establishment, it was converted into an archiepiscopal palace, and has ever since been the town residence of the primate of all England. Great additions were made to it about 1250, and, in the 15th century, Archbishop Chichele built a square stone tower towards the river, called the Lollard's Tower, from the fact of some of those early reformers having been confined in it. Subsequent additions were made by Cranmer, Pole, Parker, Juxton, Sancroft, and Tillotson; but the whole, as seen from the outside, is a heavy, dull-looking brick structure, little interesting except from its antiquity. Recent additions, however, completed in 1833, at a cost, including internal fittings, of nearly 80,000*l.*, are executed in better taste. The new buildings, of Bath stone, stand in the gardens, E. of the old palace: the principal edifice is a splendid structure, the ornamental portions, which are particularly rich, being copied from Westminster and St. Alban's Abbeys. The entrance front, flanked with square towers, is 160 ft. in length, the opposite or garden front being 30 ft. longer. The principal rooms are of fine proportions, and richly though chastely embellished,

Digitized by Google

the wood-work being almost wholly of oak. The library is perhaps one of the finest parts of the interior; and though remarkably plain in its decorations and furniture, produces, from its great size, a very imposing effect. It contains upwards of 25,000 vols., among which are many rare works in classics and divinity; and the MSS., some connected with the history of the see, and others of a miscellaneous character, are said to be very valuable. In the older parts of the building the chief rooms are the long gallery, containing a curious collection of paintings, chiefly portraits of former prelates; the great hall, with an open roof of oak, presenting one of the best specimens in the country of internal Gothic decorations; and the chapel, a small but extremely elegant apartment, fitted up with oak stalls, pews, and an exquisitely carved pulpit and screen. The park and gardens belonging to the palace occupy about eighteen acres; they are completely walled round: nearly four acres are appropriated to the kitchen garden, the rest being planted and laid out in shrubberies.

Cemeteries.—The crowded state of most of the metropolitan churchyards, and the growing conviction of their injurious influence over the health of the neighbourhoods in which they are placed, have, within the last generation, suggested the establishment of public cemeteries at some distance from town. The first of these, at Kensal Green, occupying a piece of ground 48 acres in extent, tastefully planted and laid out, was opened in 1832. It is situated in the NW. suburb of London, and has chapels, where the funeral service is performed according to the rites of the Church of England, and of other religious persuasions. The success of this undertaking, which was long opposed by ignorant prejudice, led to the construction of other cemeteries. That at Highgate, consecrated in 1838, and occupying about 40 acres, in an elevated situation N. of the city, commands a very extensive view. The Norwood cemetery, 6 m. S. of the city, is about the size of that last mentioned. Other cemeteries have been completed at Woking, on the London and South Western railway—to which the coffins are daily conveyed in the 'dead train'—at Colney Hatch, on the Great Northern railway—which has likewise its diurnal train for the dead—at Abney Park, Stoke Newington; at Earl's Court, Brompton; and at Victoria Park and Bow Common in the E. The Woking cemetery is known as 'the Necropolis.' At first the new cemeteries were found too expensive to be used by the poorer classes, but various changes in the tariff of burials gradually adapted them to their use. The act of the 13 & 14 Vict. c. 52 (1850), providing for the abolition of intramural interment, provides, also, for the formation of new burial grounds in convenient situations, and at reasonable rates of charge.

Commercial Establishments.—The establishments connected with commerce are on a scale commensurate with the amount of business to be transacted. The public buildings for commercial purposes consist chiefly of the Bank of England, Royal Exchange, Stock Exchange, Custom House, Corn Exchange, and Coal Exchange. The Bank of England, from its first incorporation in 1694 to 1734, transacted its affairs at Grocers' Hall, in the Poultry. The first stone of the present building was laid in 1732; forty years afterwards the E. and W. wings were added; and in 1781 the church of St. Christopher was taken down to make room for further additions. Until 1825, this edifice exhibited a great variety of incongruous styles; but endeavours have since been made, and with some success, to produce uniformity. The building is insulated, and covers 8 acres: its shape is an irregular parallelogram, the longest side measuring 440 ft. Many of the rooms in the interior, such as the court-room, pay-hall, and dividend-office, are spacious and well-proportioned: the largest and loftiest of all is the rotunda, a circular hall, 57 ft. in diameter, and crowned by a handsome cupola and lantern. The chief transactions connected with the funds take place in this apartment. The affairs of the Bank of England are managed by a governor, deputy governor, and twenty-four directors, elected annually. The business is conducted by about 800 clerks, whose salaries amount to nearly 200,000*l.* A valuable library, intended for their especial use, has been established in the bank.

The Royal Exchange, originally erected by Sir Thomas Gresham in 1566, was burnt down in the great fire. It was rebuilt within three years, and extensively repaired between 1820 and 1826. Having been again destroyed by fire on the 10th of January, 1838, it was once more rebuilt, from a design by Mr. Tite, and is now one of the most notable edifices of the city. It is quadrangular, and has a colonnade and pediment fronting Cornhill. The court inside is surrounded by piazzas; but the merchants and others frequenting the building are not sufficiently protected from the weather, a defect which is much complained of. In the quadrangle is a statue of Queen Victoria, by Lough, and it is further ornamented with statues of Queen Elizabeth, Sir Thomas Gresham, and Sir Hugh Myddelton. Lloyds, and other mercantile corporations, have their offices in the building. It was opened on the 28th of October, 1844.

The Coal Exchange, in Lower Thames Street, is a magnificent, though rather incongruous, building. The great hall, which is circular, is 60 ft. in diameter, and 74 ft. to the apex of the glazed dome by which it is covered. The structure cost about 40,000*l.*

The Custom House, a large building by the river side, between London Bridge and the Tower, was open for business in 1817. The old one was burnt down in 1814, though not before the present building was begun, the former having been inconveniently small. The river front, 480 ft. in length, is built of Portland stone, and, though rather plain, is decorated by three porticoes, each supported by six Ionic columns. The *long room*, where the public business is transacted, is 185 ft. in length, 66 ft. in width, and 55 ft. in height. Owing to the insufficiency of its foundations, this structure became insecure, and had to undergo some very extensive repairs in 1825.

River and Port.—The river Thames, formerly looked upon as entirely destined for the use, and not in the least for the ornament, of the great metropolis, which stands at its banks, has in recent years been more kindly treated. By the establishment of a gigantic system of drainage (see *post*) it has ceased to be the main sewer of London, while the erection of long lines of magnificent quays will make both banks of the river the finest streets and promenades in the world. A bill for the embankment of the river Thames on the Middlesex side was laid before parliament in the session of 1862, and another for a partial embankment on the Surrey side in 1863, and both having eventually become law, the works were commenced in the latter part of 1864. The undertaking, which, at the lowest estimate, will cost from three to four millions sterling, is to be completed about the year 1870; its main features are a roadway, from 100 to 200 ft. wide, running right along the banks of the river, on a level, at Westminster, with the existing

Digitized by Google

houses of parliament, and sloping down eastward so as to pass under all the bridges farther down. The construction of the Thames embankment is entrusted to the Metropolitan Board of Works.

What is legally termed the port of London extends 6½ m. below London Bridge to Bugsby's Hole, beyond Blackwall; though the actual port, consisting of the upper, middle, and lower pools, does not reach beyond Limehouse. The whole of the latter space is generally covered with vessels; a channel, only 300 ft. wide, being left clear for craft passing up and down the river. The port having been long insufficient for the proper accommodation of the shipping resorting to London, and being often blocked up by fleets of merchantmen; the quays also being heaped with bales, boxes, bags, and barrels in such confusion that the most barefaced robberies were committed with impunity, the necessity of further protection for merchandise became evident. Accordingly, at the close of last century, it was determined to excavate wet docks, capable of accommodating a large number of ships, with contiguous warehouses, the whole being enclosed by high walls. The West India Docks, the first of these establishments, and the largest belonging to the port, were opened in 1802. They are situated about 4 m. down the river: including the City Canal, a work intended for another object, but now a part of this establishment, they comprise about 295 acres, ¼ part of which is covered with water, the rest being occupied with quays and warehouses, the latter of great magnitude, and furnished with every convenience. They have an import and an export dock, with sufficient accommodation for 500 large merchantmen. The London Docks, about 1½ m. from London Bridge, were opened in 1805. They cover about 100 acres of ground, of which nearly a third part is water. The vaults beneath the warehouses have cellarage for 65,000 pipes of wine, and one of them has an area of 7 acres. The tobacco warehouses are very extensive. The East India Docks, smaller than those above described, and further down the river, were opened in 1808. Their water-area is 30 acres, and their great depth (23 ft.) enables them to accommodate vessels of very large size. The E. and W. India Dock Companies are now incorporated, and form only one association. The Commercial Docks, on the S. side of the river, consist principally of the old docks for the Greenland ships, enlarged and provided with warehouses for bonding foreign corn. They comprise 49 acres, 40 of which are water; and are principally used by vessels engaged in the Baltic and E. country commerce and the importation of timber. The St. Katherine's Docks, opened in 1828, are the nearest to London Bridge, being just below the Tower. They enclose 24 acres, of which 11½ are water. The warehouses, which are on a very extensive scale, are close to the quays, having the lower or basement story open for the purpose of receiving or delivering goods from and to vessels that are being laden or unladen: the arcades are supported by iron columns of great strength. These docks have all been constructed at a vast expense, by joint-stock companies; and have, on the whole, been profitable concerns, though they have redounded more to the advantage of the port than to that of their projectors.

The number of colliers frequenting the port has often suggested the idea of excavating docks for their accommodation in the Isle of Dogs, opposite Greenwich; but nothing has yet been effected towards the execution of this plan, although the sea-borne coal trade with London is immense. In the year 1864 there entered the port 3,116,703 tons of coal, in 8,214 ships; and to this immense tonnage Newcastle-upon-Tyne contributed 1,286,352 tons, in 2,712 ships; Seaham, 149,841 tons, in 616 ships; Sunderland, 903,721 tons, in 2,072 ships; Middlesborough, 77,640 tons, in 259 ships; Hartlepool and West Hartlepool, 509,692 tons, in 1,786 ships; Blyth, 9,836 tons, in 35 ships; while there came from Scotland, 17,004 tons, in 113 ships; from Wales, 92,647 tons, in 252 ships; from Yorkshire, 26,640 tons, in 198 ships; of small coal, 30,913 tons, in 74 ships; 12,290 tons cinders, in 97 ships, and 307 tons from Duff.

Exclusive of the above, a vast quantity of coal, amounting to 2,359,723 tons in 1864, is brought into London by railway. The London and North Western railway alone brought 916,697 tons in the year 1864.

The immense extent of the trade of London will be apparent from the subjoined statement of the gross customs revenue of the port in the undermentioned years:—

Years	£	Years	£
1835	11,773,616	1859	12,740,242
1840	11,088,053	1861	11,905,555
1845	11,034,806	1862	12,156,115
1849	11,070,176	1863	11,974,397

The total customs revenue for England and Wales, in the year 1863, amounted to 18,386,359*l.*, of which, it will be seen, London produced about two-thirds. This, however, does not exactly represent the proportion which the commerce of London bears to that of England. The imports into several of the other great ports, including Liverpool, Hull, and Newcastle, consist principally of cotton, wool, flax, and other raw materials of British manufactures, which are mostly admitted free of duty; whereas the imports into London consist principally of articles of consumption, including tobacco, sugar, tea, coffee, wine, and spirits, on which high duties are paid. Hence it is that the amounts of the import duties collected in different ports afford no fair criterion of the real extent of their import trade. In regard to exports, the articles produced in London are intended more for the home than for foreign demand, and do not constitute any very large proportion of the shipments to foreign parts. These, however, are notwithstanding very large; for, owing to the extreme facility of communication between London and the manufacturing districts, and the low rates at which goods may be lodged in the dock warehouses, London has greater facilities than any other port for the making up of mixed or assorted cargoes, and has, in consequence, a large export trade. Thus, in 1863, the declared value of British and Irish produce exported from London amounted to 36,211,510*l.*, while the exports from Liverpool, in the same year, amounted to no less than 65,154,232*l.*, or nearly double the value of the exports from London. In 1864, the total value of home produce exported from London was 36,554,913*l.*; while Liverpool exported, in the same year, goods of the value of 74,748,031*l.* The declared value of cotton manufactures alone, exported from Liverpool in 1864, amounted to above 32 millions sterling. There can, therefore, be no doubt that, as respects foreign trade, London is surpassed by Liverpool. But, as regards foreign and home trade taken together, London is at least equal to any other place in the world—truly the *universi orbis terrarum emporium*.

The subjoined table shows the total number and tonnage of vessels, both sailing and steam, which entered the port of London in the year 1863. The first column gives the number and tonnage of British vessels, and the second the total shipping, including foreign, which arrived in the port.

Digitized by Google

From Foreign Countries	British Shipping		Total Shipping, British and Foreign	
	Number	Tons	Vessels	Tons
Russia:				
Baltic Ports . .	464	112,386	790	171,759
White Sea and Arctic Ocean	53	11,037	114	23,932
Black Sea and Sea of Azof	44	23,840	82	42,031
Sweden:				
Ports within the Baltic .	60	13,244	604	152,407
Ports without the Baltic	106	28,225	366	65,260
Norway . . .	58	4,790	499	130,671
Denmark . . .	92	46,295	580	85,491
Iceland and Faroe Islands	—	—	2	121
Prussia	353	81,917	735	167,904
Germany . . .	237	87,005	539	155,933
Holland . . .	510	173,418	833	234,367
Java	1	396	2	776
Belgium . . .	433	88,752	518	115,812
France:				
Ports without the Mediter.	1,012	214,244	1,299	240,354
Ports within the Mediter.	10	1,431	15	2,696
Algeria . . .	9	1,977	17	3,341
Portugal:				
Portugal Proper	154	39,643	184	43,793
Azores . . .	160	17,218	172	19,028
Madeira . . .	11	1,157	12	1,357
Macao	2	842	4	1,533
Spain:				
Ports without the Mediter.	58	10,339	103	22,871
Ports within the Mediter.	108	20,694	135	28,264
Canaries . .	10	2,318	10	2,318
Philippine Isl.	16	12,970	24	18,637
Italy	189	41,811	238	50,404
Papal States . .	3	592	7	1,147
Austrian Terri.	22	12,501	35	16,116
Greece	21	6,453	24	7,233
Turkey . . .	88	29,157	119	39,404
Wallachia and Moldavia .	3	419	9	1,768
Syria	9	2,659	9	2,659
Egypt	65	28,834	111	44,789
El Hedjaz . . .	4	1,188	4	1,188
Morocco . . .	44	7,453	44	7,453
U. S. of America:				
Atlant. Ports, N.	84	47,052	256	190,209
Do. Southern .	2	493	7	3,612
Cuba and Foreign W. Indies	108	27,449	206	53,484
C. and S. America	115	51,794	211	95,912
China (excl. of Hong Kong)	165	101,718	171	105,290
Borneo	4	2,257	4	2,257
Siam	1	219	2	619
Japan	14	5,710	17	6,848
Sandwich Islands	1	232	2	578
E. Coast of Africa	2	1,270	3	1,390
Western Coast of Africa, Foreign Poss.	35	6,531	45	8,850
From British Possessions.	4,940	1,369,930	9,163	2,371,866
Channel Islands	602	83,103	604	83,272
Gibraltar . . .	42	26,524	43	26,655
Malta and Gozo .	6	2,185	6	2,185
Ionian Islands .	69	19,136	71	19,414
Poss. in Africa .	179	68,508	191	73,130
East Indies . .	457	340,721	552	398,993
Hong Kong . .	9	5,939	12	6,894
Australian Colo.	125	113,194	129	115,160
Aden	1	570	1	570
N. American Col.	183	107,706	327	180,524
West Indies . .	489	149,554	527	162,356
Falkland Islands	2	500	2	500
	2,164	917,640	2,445	1,069,653
Total . . .	7,104	2,287,570	11,608	3,441,519

On the 1st of January, 1864, there belonged to the port of London 731 sailing vessels under 50 tons, of a total burthen of 25,364 tons; 1,873 sailing vessels above 50 tons, of a total burthen of 801,200 tons; 175 steamers under 50 tons, of a total burthen of 5,060 tons, and 437 steamers above 50 tons, of a total burthen of 227,732 tons.

The *insurance* of houses, ships, and lives is carried on to a far greater extent in London than anywhere else. Marine insurances are often effected by private parties; but other insurances are generally made by joint stock companies.

Manufactures, Retail Trade, and Markets.—London presents itself under too many points of view to be called a manufacturing city; yet it is the seat of many, and of some very extensive, manufactures, several of which have their distinct quarters.

The silk manufacture is conducted on a large scale in Spitalfields, Bethnal Green, and Mile-end. The trade fluctuates extremely, owing chiefly to the caprices of fashion, and great numbers of workmen are often thrown out of employment; but the distress, so often said to prevail in this densely-peopled district, is owing at least as much to the improvident habits of many of the weavers as to any falling off in the demand for labour. The nett wages of plain silk weavers, when fully employed, range from 9*s.* to 11*s.* 6*d.*, and those of velvet weavers from 15*s.* to 23*s.* a week. With respect to physical condition, this numerous body are, speaking generally, diminutive, impoverished, and feeble, unable to withstand disease, and not long-lived, circumstances attributable to close in-door employment, bad air, bad lodging, and bad food. There is a great tendency to epidemic fevers in close and ill-drained neighbourhoods, and in no part of London are the fatal effects of lodging in close courts and cellars more visible than in Spitalfields and Bethnal Green.

Porter is the favourite beverage of the lower and also of a considerable portion of the middle classes of London. The breweries in which this favourite liquor is prepared are mostly on a very large scale; and are, indeed, among the greatest manufacturing establishments in the metropolis, much exceeding the breweries to be found anywhere else. In addition to the capital vested in buildings, machinery, and horses, a first-rate brewery has, also, a large amount of capital vested in public-houses in all parts of the town. The principal establishments produce from 250,000 to 300,000 barrels a year, principally porter and stout, but partly also ale. It has been estimated that about 1,200,000 barrels, or 43,200,000 gallons, of porter and ale are brewed for consumption in London only, besides which great quantities are sent to different parts of the United Kingdom, and exported to the E. and W. Indies, the United States, and Continental Europe. The splendid teams of horses in the drays belonging to the chief breweries are objects of general admiration in the metropolis. There are several very extensive distilleries, vinegar-factories, chemical works, and soap-boiling houses, most of which are situated on the S. side of the river. About 40 large engineering establishments employ many thousand workmen in making steam-engines and other machinery, chiefly in Lambeth, Southwark, Deptford, and Greenwich.

The principal sugar refineries are in Whitechapel, E. of the city. Clock and watchmakers, who are numerous, reside principally in Clerkenwell. The finest cutlery and hardware are produced, and the manufacture of metals of all kinds is carried on to a great extent. About 5,000

Digitized by Google

ounces of gold plate and 1,000,000 ounces of silver are annually assayed in London. Coach-building is an important business, and the carriages of London are not only the handsomest, but the best built and most durable of any in the empire. Great numbers are made for exportation. Many hands are employed in type-founding; and the manufacture of musical instruments, particularly pianofortes and harmoniums, is conducted on the largest scale. The tanning, currying and dressing of leather is carried on more extensively in Bermondsey than elsewhere in the U. K. And, notwithstanding large numbers of shoes are imported ready made from Northampton and other places, their manufacture and that of harness gives employment to an immense number of hands in the metropolis. Ship-building, and the infinite variety of trades connected with shipping, are extensively carried on E. of London Bridge. Owing to the extent to which the division of labour is carried, the tradesmen and artisans of London have attained to the greatest proficiency; and it is generally admitted that the jewellers, silversmiths, engravers, cabinet-makers, printers, tailors, shoemakers, and book-binders of the metropolis are quite unrivalled in their respective crafts.

There are no means of forming anything like even a rough estimate of the extent of the retail trade of London, but it must be immense. The trades, generally speaking, are mixed indiscriminately, though some remains may yet be traced of the ancient custom of particular trades congregating in particular places. Thus there are still numerous coach-makers in Long Acre, booksellers in Paternoster Row, and bankers in Lombard Street. A good deal of business was formerly transacted by itinerant vendors, who were producers at the same time; but these are now seldom met with. Fashionable shops attract attention by the magnificence and georgeousness of their wares, and intense competition has cheapened the price of all commodities to such an extent, that it has become absolutely impossible for even the smallest manufacturers to hawk about their wares.

The *Markets* of London are supplied at all seasons, and with all sorts of articles, whether produced in the U. Kingdom, or in the most distant countries, with a facility and a regularity that are truly marvellous, and could not *à priori* have been deemed possible. In the great provision markets articles are sold, partly by wholesale and partly by retail. Generally, however, the inhabs. prefer purchasing at shops distinct from the markets. The great market for live stock, which is sold on Mondays and Fridays, is Copenhagen Market, situated at Copenhagen Fields, an elevated plateau, at the top of Caledonian Road, Islington. The market, which was opened in 1856, occupies an equal-sided rectangle, of 15 arches, on ground sloping from the west. In the midst of the market stands a lofty clock-tower, visible at a distance of 12 miles, and around are a number of storehouses, taverns, and various other buildings. Accommodation is provided for 34,980 sheep; 6,116 bullocks, and about 3,000 calves and pigs, all being kept in separate pens. Exclusive of the stock brought to Copenhagen Market, a good many cattle and sheep are imported in steamers, and privately sold; and in the colder months slaughtered cattle and sheep are extensively imported, particularly from the ports on the E. coast. Newgate and Leadenhall markets, with the Whitechapel carcass butchers, supply most part of the butchers of the town and neighbourhood.

Covent Garden is the principal vegetable market, and the immense supply of the finest fruits and vegetables, and the beauty of the plants on sale, make it well worth a visit. Billingsgate is the great fish market, whence fish of all sorts are distributed to the shops and markets in different parts of the town, particularly on Fridays, when the demand—owing to the consumption of the Roman Catholic population—is of extraordinary proportions. The corn market, held in a fine Doric building, in Mark Lane, is attended almost exclusively by wholesale dealers.

Leadenhall is the principal market for the sale of poultry and game; but great quantities are sold in Newgate and other markets, and many poulterers in all parts of the town, and private families, are supplied in whole or in part direct from the country, and not at second-hand from the markets. In severe winters there are large supplies of wild ducks, principally from Holland, as well as woodcocks. Snipes come principally from Ireland. Three-fourths of the pigeons come from France. Black-cocks are all from Scotland. Sometimes, after a grand *battue*, there is a glut of hares and pheasants in Leadenhall Market.

Exclusive of those brought from the different parts of the U. Kingdom, about two millions of 'great hundreds' of eggs are annually imported into London from France and other foreign countries. The imports amounted to 1,936,010 great hundreds of eggs in 1862, and to 2,224,414 great hundreds in 1863. About 20,000 cows are kept in the city and its environs for the supply of milk and cream. The consumption of wheat may, perhaps, be estimated at about 2,000,000 quarters a year, and the vast number of horses in London, and their high keep, occasions an immense consumption of oats. The imports of salmon from Scotland and other parts of the U. K. may be estimated at from 2,500,000 lbs. to 3,000,000 lbs. a year; and to this have to be added large quantities that are imported from Holland and the N. of Europe. The supplies of turbot, cod, lobsters, oysters and shrimps are quite immense. The best cod is brought from the Dogger Bank, and the greater number of the lobsters from Norway. The value of the fish, vegetables, and other food consumed in the metropolis has been set down by some intrepid calculators; but the data on which they formed their estimates were too loose and unsatisfactory to entitle them to any credit.

External and Internal Communication.—The communication between London and foreign countries is carried on chiefly by steamers, regular lines being established with the principal foreign and colonial ports. These, also, are the media of communication between London and the various ports of Great Britain and Ireland. The intercourse with the interior is mainly by railways, but partly still by canals and ordinary roads. There is not a town of 2,000 inhabs., within a radius of 100 miles from London, that cannot be reached by railways. What are called 'pleasure trains,' or 'excursions,' at extremely low fares for the accommodation of the lower classes, are frequent in summer, and carry vast numbers of passengers. In addition to the great lines of communication, short lines are opened to Blackwall, Greenwich, Kew, Richmond, Windsor, and other places in the vicinity of town, on which trains are run every five or ten minutes. But most serviceable of all to the inhabitants of London is the Metropolitan or Underground railway, running from the terminus of the Great Western railway at Paddington to the heart of the city, mostly following the course of the circular line of thoroughfare known as the New Road. The Metropolitan railway, opened in 1863, carries annually above 15 millions of passengers, equal to five times the population of London. There travelled over the line, in the

Digitized by Google

first six months of 1865, no less than 7,462,823 persons, of which 832,112 were first-class; 1,519,887 second-class; and 5,110,823 third-class passengers.

There are seven great railways centring in London, besides numerous smaller lines. The Great Western at Paddington, the London and North Western at Euston Square, the Great Northern at King's Cross, and the South Eastern at Charing Cross and Cannon Street, have noble stations, of immense size, worthy of the metropolis. The Doric portico, at the terminus of the Great North Western railway at Euston Square, and the hall inside, are amongst the most magnificent structures of their kind anywhere to be met with. The hall is 130 ft. in length by 62 ft. in width, and 64 ft. in height.

The Thames is, also, a grand line of communication; the intercourse between the E. and W. ends of the city, and with the different places above and below the bridges, such as Putney, Barnes, Kew, Richmond, and Kingston on the one hand, and Greenwich, Woolwich, Gravesend, and Margate on the other, being kept up by means of steamers. Of these about 70 ply, during the summer season, between the limits above referred to, those plying between the bridges passing and repassing almost incessantly. In fine weather, especially on Sundays, they convey vast numbers of passengers. It is estimated that the receipts of the river steamers amount in the season to nearly 10,000*l.* a week.

The port of London is connected with the Irish Sea by a chain of canals, of which the Regent's Canal, passing along the N. of the city, is the first link. Nearly all the railways are connected with the port.

Hackney coaches were introduced more than 200 years ago; and previously to the introduction of cabriolets, in 1820, were very numerous, but they are now all but wholly superseded by the latter, and by 'Hansom' cabs. It is a singular and not easily explained fact that, with but few exceptions, the hackney coaches and cabs to be found in the streets of London are the dirtiest, shabbiest, and most uncomfortable carriages that are anywhere to be met with. The drivers are worthy of the carriages; the one and the other being a disgrace to the city, and such as would not be employed anywhere else.

Literature.—London ranks still higher as a literary than as a commercial city. Notwithstanding the encouragement given to learning and science in Oxford and Cambridge, London is the favourite resort of literary and scientific men. Its immense population, the wealth and intelligence of its inhab., and the circumstance of its being the seat of government, attract aspiring individuals from all parts of the empire, especially those ambitious to distinguish themselves in literature or politics. The practical, common-sense character of the philosophy and literature of England is probably, indeed, in no small degree owing to its being principally cultivated in London, where the writers, by mixing with the world, learn to avoid those over-refined theories and fanciful distinctions in which recluse speculators are so apt to indulge. With the exception of the provincial newspapers, the whole periodical literature of England centres in London. The number of persons engaged in this department, as authors, publishers, printers, and kindred occupations is very great. London, in 1865, had 16 daily newspapers, and more than two hundred appearing at other intervals. Many of these journals display great, and some consummate, talent; and, considering the extreme rapidity with which articles for the daily papers must be written, and the want of time for revision, they are certainly skilful, though not always admirable performances. So far as respects its newspaper press, London is infinitely superior to every other city in the United Kingdom; and however one-sided, prejudiced, and little to be depended on these newspapers are in party matters, they are unsurpassed in ability, variety, and interest. A prodigious number of weekly, monthly, and quarterly magazines, reviews, and other publications, issue from the London press; and though many of these are of a very trashy and worthless description, a considerable number are of a widely different character, well fitted to amuse and instruct all classes of readers. In 1865 the aggregate issue of newspapers published in London was estimated as follows:—Daily, 248,000, which multiplied by 6, gives a weekly issue of 1,488,000; and again multiplying these by 52, they give for a total the annual issue of 77,376,000 copies.

Weekly Publications.

Newspapers (proper)	1,149,000
Illustrated Newspapers	510,400
Sporting ditto	252,500
Horticultural and Agricultural ditto	47,000
Building, Engineering, Mining, and Railway ditto	44,050
Literature, Science, Art, also Literature with Political Leaders	40,750
Medical and Chemical	15,500
Law	12,000
Musical	8,500
Religious	183,700

Aggregate weekly issue of the whole 2,263,200 multiplied by 52 shows the annual issue to be 117,686,400, which added to the yearly issue of daily, as above, shows the grand total of a year's issue of newspapers for London to be 195,062,400.

Education.—London, unlike most other European capitals, had no university empowered to grant degrees till 1836, when one was established by royal charter (renewed in 1837) for the 'advancement of religion and morality, and the promotion of useful knowledge,' without distinction of rank, sect, or party. This institution differs from most other universities, in its having nothing to do with the business of education, being constituted for the sole purpose of ascertaining the proficiency of candidates for academical distinctions. It is, in fact, a board of examiners, empowered to grant degrees in science and literature to such candidates as are found, on examination, to have attained the required proficiency. The senate, or board, consists of a chancellor, vice-chancellor, and thirty-five other members. The faculties are those of arts, law, and medicine, in each of which are several examiners, some of whom are members of the senate. The sittings are held in Somerset House, and the examinations are half-yearly. The greatest number of candidates for degrees are usually furnished by the University and King's Colleges, both of which are proprietary establishments. The former of these, opened in 1828, is governed by a council and senate of professors: the course of education embraces classics, pure and mixed science, history, jurisprudence, and medicine, religion being wholly excluded. The success of the medical school, which has for some years been the largest in London, has led to the erection of a good hospital close to the college. King's College is a similar establishment to that last mentioned, and is similarly conducted, except that religion is taught in it in accordance with the principles of the Church of England. The general classes are well attended, as is the junior school. The buildings of these establishments are

Digitized by Google

handsome and commodious: the portico of University College is one of the finest in London.

Among the numerous endowed schools in the metropolis, the most celebrated are. 1. Westminster School, founded by Queen Elizabeth in 1560, for the free instruction, clothing, board, and lodgment of 40 boys, called king's scholars. But, in point of fact, their education is not free, but costs, with board and lodging, about 45*l.* a year. The school is attended by other boys, partly boarders and partly day-boarders, the number of whom varies according to circumstances. The king's scholars are selected for merit from the whole school. At the end of the fourth year, 8 or 10 of the senior boys are elected off, according to the vacancies occurring, as students to Christchurch, Oxford, or as scholars to Trinity College, Cambridge. The school forms part of the collegiate establishment of the abbey. Dryden and Locke were educated in it; and William Murray, the famous Earl Mansfield, was a king's scholar, and dux in 1723. 2. The Charterhouse (corrupted from *Chartreux*), founded in 1611, and endowed with property, the gross rental of which amounts to above 25,000*l.* a year. There are on the foundation boys of two classes, pensioners and scholars, both nominated by the governors, among whom are usually some of the most distinguished personages in the country. The number of pensioners is limited to 80, and that of scholars to 44. The former are boarded and lodged at the expense of the hospital, and have, in addition, a pension of 25*l.* a year (whence their name) and a gown: the scholars are educated wholly at the expense of the hospital, but have no pension. The exhibitions to the universities belonging to this school do not appear to be limited in point of number. Boys elected to them have their option both as to college and university; and are allowed 80*l.* a year for the first three years, and 100*l.* for proceeding to the degree of B.A. Gratuities of 100*l.* are given to those scholars who do not proceed to either university. Besides the foundation-boys, the school is attended by others, whose number fluctuates according to the reputation of the masters. 3. Merchant-Tailors' School, founded in 1561, in Suffolk Lane, Thames Street. The statutes provide that a classical education be furnished gratis for 100 boys, and for 150 others at rates varying from 5*s.* to 2*s.* 6*d.* a quarter. The scholars are examined once a year, and the most advanced are sent to Oxford, where the school has 43 fellowships, of which 37 were founded in St. John's by Sir Thomas White. It has, also, 7 fellowships at Cambridge. 4. St. Paul's School, established in 1509 by Dean Colet, and placed by him under the direction of the Mercers' Company, provides a free education for 153 boys, the most advanced of whom are sent to Oxford and Cambridge, with exhibitions varying from 50*l.*, or less, to 120*l.* in value. The present building was erected in 1824; the gross income of the school is upwards of 6,000*l.* It has to boast of having had Milton for a pupil. 5. Christ's Hospital, more commonly known as the Bluecoat School, was incorporated by Edward VI. in 1553, and owes its origin to the active benevolence of some distinguished citizens. It was, whatever may be the case at present, originally intended to maintain, clothe, and educate the young and helpless; and 340 boys and girls were admitted soon after its foundation. A second charter from Charles II., in 1673, provided for the education of 40 boys in mathematics and other learning calculated to qualify them for the sea-service. The management of the institution is vested in a body of governors, who must have each contributed at least 500*l.* to the funds of the institution. An individual, on becoming a governor, is entitled to present one boy; and he has usually a presentation once every succeeding three years. The revenue of the hospital, arising from rents and all other sources, amounts to above 60,000*l.* a year, and its expenditure to nearly as much. Its establishment in London, on the site of the Old Grey Friars' monastery, accommodates 920 boys; and it has attached to it a subsidiary establishment at Hertford, for the younger children, where there are usually about 450 boys and 80 girls; making in all about 1,450 children, maintained, clothed, and educated by the establishment. There are schools for grammar, mathematics, writing, and drawing. The *Grecians*, or those most advanced in the grammar school, are sent with valuable exhibitions to Oxford and Cambridge, and those in the mathematical school are placed with commanders of ships, and equipped with clothing and nautical instruments, at the hospital's expense. Others are apprenticed to different trades. A magnificent building, called the Great Hall, erected by public subscription, and finished in 1829, opens towards Newgate Street, and is one of the ornaments of the city. The hall, in which the children breakfast, dine, and sup, is 187 ft. in length, 51 in width, and 46½ ft. high. Occasionally they sup, though with questionable propriety, in public, and on these occasions there is a great concourse of strangers to witness the spectacle. The interior arrangements deserve praise; and every attention is paid to the health and comfort of the children. The well-known dress of the boys, which has not been changed since the formation of the institution, is, however, not merely antiquated, but inconvenient and uncomfortable. Presentations can only be obtained from the governors. 6. The City of London School, established in 1835, may be said to have resulted from the inquiries of the Charity Commissioners. A Mr. Carpenter had left an estate for a school, and the value of the property had greatly increased without any proper application of the funds. Repeated inquiries and remonstrances at length induced the corporation to establish a school on the site of Honey Lane Market, Cheapside. The system of instruction is said to be good, and the school is attended by upwards of 500 boys. The buildings, occupying a space 180 ft. long and 80 ft. broad, are commodiously contrived, and have externally some pretensions to architectural elegance.

Independently of these and other endowed schools, almost every parish supports a free school by voluntary contributions, and thus about 14,000 children of both sexes are clothed and educated. The number of private and Sunday schools is extremely great, but cannot be accurately estimated. The National Society, in connection with the Church of England, has done much to diffuse education. In Middlesex only it supplies instruction in week-day and Sunday schools to no fewer than 80,000 children; of whom about 22,000 attend week-day schools only, and 19,000 Sunday schools only. The model school of this society is in the Sanctuary, Westminster. Great numbers of children are also taught in the Lancastrian method by the British and Foreign School Society. The model boys' school belonging to this society in the Borough Road has about 700 boys, and the model girls' school, about 300 girls in constant attendance. Both this and the National Society have normal schools for the instruction of school-masters and school-mistresses. Much, however, still remains to be done towards giving a sound elementary education to the children of the industrious classes.

The charges on account of education at most of

Digitized by Google

the superior schools in London, except to boys on the foundation, are oppressively high, the most reasonable being three times as expensive as the High School of Edinburgh, which is quite equal to the best of them. This circumstance, combined with the want of schools in many districts, and the wish to improve their health, has led to the practice, so general in London, of sending children to the outskirts of the town to be boarded and educated. But the education in many of these boarding establishments is of a very worthless description; and it is surprising that no effort should have been made by subjecting the masters to examination, or otherwise to improve the quality of these suburban seminaries.

British Museum.—This national institution, established in 1753, comprises an immense repository of books, MSS., statues, coins, and other antiquities, specimens of animals, minerals, and works of art, and is, in most respects, one of the richest in Europe. The museum consists of a group of buildings raised on the site of Montague House, formerly the residence of the Duke of Montague, Great Russell Street, Bloomsbury. The nucleus of the collection was purchased by government of Sir Hans Sloane's executors for 20,000*l.*, and the museum was first opened to the public in January, 1759. But Montague House, though spacious as a private residence, having been found inadequate to the proper accommodation of the vast and continually increasing collections that belong to the museum, a new quadrangular building, on a very extensive plan, was designed by Sir R. Smirke, and is now open to the public. In 1755 the Harleian MSS. were purchased, and the Cottonian library was removed from Dean's Yard, Westminster: in 1757 the Royal library, founded by Henry VIII. out of the libraries of the suppressed monasteries, and enlarged by his different successors, was presented by George II. George III., in 1763, gave a valuable collection of pamphlets on the civil wars; and, between 1806 and 1818, the Lansdowne, Hargrave, and Burney MSS. were purchased at an expense of 26,400*l.* Various presents have been made from time to time: the most valuable additions of late years having been the library of George III., collected at an expense of 200,000*l.*, and presented to the museum by his successor; and the sumptuous collection of Mr. George Grenville, valued at 60,000*l.*, and bequeathed by him to the nation. Modern English publications are added, free of expense, in consequence of a privilege which this establishment enjoys in common with the two universities, and some other bodies, of receiving *gratis* a copy of every book entered at Stationers' Hall. A considerable sum is expended in the purchase of old and foreign books, to which departments very extensive and valuable additions have been made of late years. The collection comprises in all about 700,000 printed books, and 31,000 MSS. exclusive of charters. The want of a catalogue *raisonné*, or rather, perhaps, of a series of such catalogues, is much complained of by the great majority of persons who resort to the library for study or research. The great reading room, erected in the inner quadrangle, and opened in 1860, forms the noblest public library in the United Kingdom, and, indeed, in the world. The reading room is open from 9 till 4 in winter; till 6 in the evening during the 4 summer months; and from 9 to 5 during spring and autumn. Admission is procured by a recommendatory letter to the chief librarian; and every facility is given by the numerous attendants for the most extensive research. No books, however, are allowed to be taken out, it being supposed that such permission would lead to frequent losses. In the department of antiquities, belonging to the British Museum, may be mentioned the collection of Egyptian monuments, including the famous Rosetta Stone, acquired at the capitulation of Alexandria, in 1801; the Townley Marbles, purchased for 28,000*l.*; and the Phigalian and the Elgin Marbles, the cost of which was 35 000*l.* The latter include the statues of Theseus and Ilissus, and the sculptures in *alto relievo*, from the friezes of the Parthenon. In recent years, the stock of antiquities has been much increased by the winged bulls and other interesting remains dug up from the ruins of Nineveh, and sent home by Mr. Layard. The collection of minerals was, for many years, deficient in various important particulars; but the additions purchased from Messrs. Hawkins and Mantell are extremely valuable; and now, both for size and classification, this department will bear to be compared with any mineralogical collection in Europe. The department of zoology is held to be rich; but there are those who cannot see the advantage of filling the museum with stuffed representations of animals that may be seen alive in the Zoological Gardens and in every menagerie. The collection of medals, which has been accumulating since the foundation of the museum, consists of about 20,000 coins, above 6,000 being purchased with the Hamilton collection of Herculanean antiquities, in 1772. The coins can only be seen by an order from a trustee, or a private introduction to the officer to whose charge they are entrusted. The public days at the museum are Mondays, Wednesdays, Fridays, and Saturdays, when all persons have free admission. The building is closed during the first weeks of January, May, and September. The establishment is governed by 48 trustees, 23 of whom are official; and to these the officers are responsible. The acting trustees, with whom the appointment of the officers chiefly rests, are the archbishop of Canterbury, the lord chancellor, and the speaker of the House of Commons.

The Royal College of Surgeons, in Lincoln's Inn Fields, has a fine portico. Its museum contains the anatomical collections of the celebrated John Hunter, bought by government and deposited in it.

The Museum of Practical Geology, in Piccadilly and Jermyn Street, is of much utility, not merely to scientific men, but to those practically engaged in the business of mining. The building was erected at the expense of government.

Literary and Scientific Societies.—Among the literary and scientific establishments of the metropolis, one of the best supported is the Royal Institution in Albemarle Street. The building, the front of which is in good taste, with 14 Corinthian columns, comprises a good library and reading room, a theatre for lectures, capable of accommodating 900 persons, and a chemical laboratory supposed to be one of the largest and best supplied with apparatus in Europe. Lectures on various subjects are delivered by the professors and other gentlemen temporarily engaged; and the important investigations made here by the late Sir Humphry Davy, Mr. Faraday, and others, have conferred on the institution a well-merited celebrity. Before the present century the learned societies of London were few in number, and very comprehensive in their objects. The great advancement of the physical sciences in recent times, and the increased ardour with which every branch of knowledge has been cultivated, have produced a corresponding increase in the number of learned associations, and in all recent instances each body has confined its operations within a limited sphere. The following list comprises some of the principal

Digitized by Google

societies, with the dates of their formation, the objects contemplated by them, when not sufficiently indicated by their names, and the publications made at their expense:—

The Royal Society; physical and mathematical sciences. Instituted early in the 17th century; incorporated 1663. 'Philosophical Transactions,' from the year 1665.

The Society of Antiquaries. Instituted 1717; incorporated 1751; but now split into two societies—the Archæological Institute of Great Britain and Ireland, and the British Archæological Association. 'Archæologia,' from the year 1770.

Medical Society. Established 1773. 'Vetusta Monumenta,' from 1747.

Society of Arts. Established 1754, for the encouragement of the arts, commerce, and manufactures of Great Britain, by granting rewards. 'Transactions,' from the year 1783.

Linnæan Society; natural history. Established 1788; incorporated 1802. 'Transactions,' from the year 1791.

Royal Institution. Established 1799, for the application of science to the ordinary purposes of life. 'Journal,' from 1810.

Horticultural Society. Established 1804; incorporated 1809. 'Transactions,' from 1812.

Royal Medico-Chirurgical Society. Established 1805. Chartered 1831. 'Transactions,' from the year 1808.

Geological Society. Established 1807; incorporated 1826. 'Transactions,' from 1811.

Society of Civil Engineers. Established 1817; incorporated 1828. 'Transactions,' from 1834.

Royal Astronomical Society. Established 1820; incorporated 1831. 'Memoirs,' from 1822.

Medico-Botanical Society. Established 1821. 'Transactions,' from 1834.

Royal Asiatic Society. Established 1823; incorporated 1824. 'Transactions,' from 1827 to 1835; 'Journal,' from 1834.

Royal Society of Literature. Founded 1821; incorporated 1825. 'Transactions,' from 1827.

Zoological Society. Instituted 1825; incorporated 1829. 'Transactions,' from 1833.

Royal Geographical Society. Chartered 1830. 'Journal,' from 1831.

Entomological Society. Established 1833 or 1834.

Statistical Society. Established 1834. 'Journal,' from 1837.

Architectural Society. Established 1831.

Royal Institute of British Architects. Established 1835; incorporated 1838. 'Transactions,' from 1836.

Royal Botanic Society. Chartered 1839.

Nearly all these societies hold meetings twice a month, from November to June inclusive, at which papers are read illustrative of matters connected with the objects of each association.

Picture Galleries.—The present national collection of pictures is of recent foundation, and, though valuable, can only be looked upon as the nucleus of one that may hereafter be worthy of the country. It occupies the W. wing of the National Gallery, erected 1834–37, at the public expense, on the NW. side of Trafalgar Square, facing Whitehall and Parliament Street, unquestionably the finest situation in the metropolis. The building has a front of 460 ft., with a portico and dome in its centre, supported by Corinthian columns. But whether owing to the limited means at the disposal of the architect, or to some incapacity on his part, the fabric is neither worthy of its site, its object, nor of the country. Unfortunately, too, the defects of its exterior are not countervailed by any superiority of internal economy, the apartments for the exhibition of the pictures being miserably deficient in point of size, and ill-arranged. The pictures, which consist of the Angerstein collection, purchased in 1824; of Sir G. Beaumont's collection, given by him in 1826; and of others, partly presented and partly purchased, are arranged in seven rooms, of diminutive size and imperfectly lighted. About half the pictures belong to the Italian school; and of these the *Ecce Homo*, and the Mercury, Venus, and Cupid, of Correggio; the Raising of Lazarus, by Sebastian del Piombo; the Bacchus and Ariadne, of Titian; and the Holy Family, by Murillo, are reckoned the most valuable. The works of the two Caracci, N. and G. Poussin, and Claude, may be here seen in their highest perfection; and there are some fine specimens of the English school, by Reynolds, Hogarth, Gainsborough, Wilson, Wilkie, and Lawrence. The gallery is open to the public on the first four days of the week: on Friday and Saturday students are permitted to copy the pictures.

The Royal Academy, which occupies part of the building devoted to the National Gallery, was established in 1768, for the instruction of young artists: lectures are delivered in anatomy, painting, sculpture, and architecture, and daily instructions are given to the students by the keeper, and other academicians. The annual exhibition of this corporate society usually comprises about 1,200 specimens of art, and is one of the favourite lounges during the summer months. The profits of the exhibition, besides paying the expenses of the schools, contribute to form incomes for the most deserving artists, while studying at Rome.

The Society of British Artists exhibits annually a good collection of pictures; but, as a whole, they are inferior to those exhibited by the Academy. The British Institution and Society of Painters in Water Colours have, also, exhibitions, and their rooms are crowded during the fashionable season. Many private individuals have splendid galleries, among which may be specified those of the Earl of Ellesmere, the Marquis of Westminster, the Duke of Sutherland, Sir Robert Peel, Mr. Hope, and others. At the Kensington Museum likewise is a valuable collection of pictures, open to the public.

Theatres and Music.—The great theatres of modern London present a curious contrast to the rude and confined buildings called the Globe, Blackfriars, and Old Drury, in the time of Shakspeare, in which neither scenery nor the comfort of the audience was at all considered. The two oldest theatres—oldest, at least in name—Drury Lane and Covent Garden, contiguous to each other, have handsome exteriors, and very extensive and highly decorated interiors. They formerly enjoyed the exclusive privilege of representing what was called the legitimate drama. But this monopoly has long ceased to be of any value. Late dinner hours, the changes or caprices of fashion, the inferiority of the actors, and other causes, contributed to weaken the taste for the regular drama, and concerts, operas, and 'entertainments' at present enjoy the largest share of public favour. Tragedy and comedy have long ceased to be performed at Covent Garden. For a while it was leased by the Anti-Corn-Law Society; and having been burnt down, and rebuilt in 1859, on a scale of great magnitude—240 by 123 ft., and 100 ft. high—it has now become an Italian opera-house, with occasional 'English opera' performances. Nearly as large as Covent Garden is 'Her Majesty's Theatre,' the other Italian opera-house. The Haymarket Theatre, which is of smaller size than the immense houses above mentioned, is open for about eight months of the year. Besides these, the chief theatres are, the Princess's, Oxford Street; the Lyceum, Wellington Street, Strand; the Olympic, Wych Street, Strand; St. James's, King Street, St. James Square; and Astley's Theatre, near Westminster Bridge. The whole of these theatres, as well as half a dozen other theatrical establishments, in the west and east end of the metropolis, are very inferior structures, badly ventilated, narrow and confined—in no proper sense 'places of amusement.'

The established London concerts consist of the

Digitized by Google

philharmonic and sacred harmonic concerts, all of which are well and fashionably attended. Many others are given by professional persons, for their own benefit, in the different public rooms in the W. end. Promenade concerts are also given in imitation of those of Paris, and numerous so-called 'music halls' have grown up within the last few years. In the latter the business of drinking and smoking holds the first rank, and music has to display its charms amidst the rattling of glasses and dense clouds of tobacco smoke. The growth of these music-halls appears to be chiefly due to the wretched state of the London theatres, which absolutely repel pleasure seekers by exorbitant prices, bad accommodation, immense difficulties of entrance and exit, and last, not least, an absolutely poisonous atmosphere.

Benevolent Institutions.—There are a vast many establishments in London for the cure of disease; consisting partly of hospitals properly so called; partly dispensaries, where medicine and advice are gratuitously administered; and partly of infirmaries for special diseases; with lying-in charities. Asylums for orphans and otherwise destitute persons, and other benevolent establishments, are also very numerous, and some of them are well endowed and liberally supported. The principal are the following:—

1. St. Bartholomew's Hospital, in West Smithfield, was first founded in the twelfth century, and refounded by Henry VIII. in 1546. The building, a spacious quadrangular structure, is principally modern, having been finished in 1770. It makes up 580 beds. Necessity is the only recommendation to this institution, and patients are received without limitation. The medical staff is equal to any in the metropolis. The staircase was gratuitously painted by Hogarth. 2. Guy's Hospital, St. Thomas's Street, Southwark, founded in 1721, contains accommodation for 580 in-patients, and has an excellent museum and theatre of anatomy. This magnificent hospital, which consists of two quadrangles and two wings, was founded and endowed by Thomas Guy, a bookseller, who expended 18,793*l.* upon the building, and left 219,419*l.* for its endowment—the largest sum, perhaps, that has ever been given by any individual for similar purposes. More recently, however, Guy's hospital met with another benefactor, but little inferior, in point of liberality, to its founder; a citizen, of the name of Thomas Hunt, having bequeathed to it, in 1829, the princely sum of 200,000*l.* The medical school attached to this hospital, while under the superintendence of the late Sir Astley Cooper, was one of the most extensive, and probably, also, the best in the empire. 3. St. Thomas's Hospital, formerly in High Street, Borough—from which site it was driven by the Charing Cross extension of the South Eastern railway—is rebuilding near Westminster Bridge, close to the river, and opposite the houses of parliament. It has an income of about 25,000*l.* a year, derived almost wholly from rents of estates in London and the country. 4. St. George's Hospital, near Hyde Park corner, has a fine front, 200 ft. in length, facing the Green Park. It accommodates 460 in-patients. 5. The Middlesex Hospital, near Oxford Street, founded in 1745, has 285 beds, and relieves numerous out-patients. 6. London Hospital, in Whitechapel, was founded in 1740. Its wards accommodate about 250 patients. 7. Westminster Hospital, rebuilt in 1833, near the Abbey, has 174 beds. 8. The Mary-le-Bone and Paddington Hospital, opened in 1850, has 300 beds. The four last-mentioned hospitals depend wholly, or almost wholly, on voluntary subscriptions, which are said to be very insufficient to meet the demands upon them. The University College and King's College Hospitals, and Charing Cross Hospital, are smaller establishments of the same nature, each accommodating about 120 patients. Besides the above, there are a number of smaller institutions for the cure and relief of the sick and suffering poor. Medical schools are connected with the chief hospitals.

Bethlehem Hospital, or Bedlam, is appropriated exclusively to the insane poor; it was founded in 1546, in Moorfields, whence it was removed, in 1815, to St. George's Fields. The present building received some extensive additions in 1839, and is now 697 ft. in length. The rooms are large and airy, well warmed and ventilated, and are sufficient for the accommodation of above 400 patients. St. Luke's, Old Street Road, established for a similar purpose in the year 1751, accommodates 260 persons.

The Foundling Hospital, Brunswick Square, was founded by Captain Coram, in 1739, but the building was not commenced till 1742. It was established for the indiscriminate admission of deserted children; but the numbers were found to increase so rapidly that the funds failed, and in 1760 the mode of admission was so much altered, that it is now nominally only a Foundling Hospital. The number of childeren averages about 500, and they are maintained till the age of 12, when they are either apprenticed or otherwise provided for. The revenue is about 10,000*l.* per annum, and is gradually increasing, as the leases fall in of the houses built on its estate.

The Magdalen Hospital, Blackfriars Road, was established in 1748, for the reformation of females who have fallen into vicious courses. The Philanthropic Institution, St. George's Fields, was founded, in 1788, for the reception and reform of young criminals discharged from prison. It provides them with immediate means of subsistence, and instructs them in some trade, so as to prevent the otherwise almost inevitable necessity of their returning to their former habits. There are an immense number of other charitable institutions in and around the metropolis, the enumeration of which would fill a volume.

Clubs.—There are about 40 clubs in the metropolis. A few of these establishments, such as White's, Brookes's, Boodle's, and Arthur's, are of ancient date; but their present arrangements and constitution are of recent introduction. The accommodation they afford to gentlemen only occasionally visiting town, and to others desirous of enjoying the luxuries of a splendid establishment, at a moderate expense, and of meeting with a great variety of society, has made them popular among the upper classes. The club-houses are mostly edifices of a very superior character, and add much to the magnificence of the squares and streets in which they are situated. Each club consists of a limited number of members, varying from 700 to 1,500; they are admitted by ballot, pay a certain sum at entrance, from 10 to 25 guineas, and an annual subscription, varying from 5 to 10 guineas. The club-houses are fitted up with every luxury of a fashionable hotel, have excellent libraries, take in the best periodical publications, and provide dinners, coffee, and wines, at reasonable prices. Some of the clubs are avowedly of a political character, and others are devoted exclusively to certain classes. Among these may be specified the Carlton, Reform, Athenæum, Conservative, United Service, Oxford and Cambridge, Travellers', Oriental, West Indian, Army and Navy, and others devoted to certain classes and professions. The majority of clubs, however, are open, on election, to all gentlemen

Digitized by Google

without reference to party or profession. Most of the club-houses are at the W. end of the town, particularly in Pall Mall and St. James's Street. The building erected for the Reform Club, by Mr. Barry, is one of the finest structures belonging to this class of edifices, and is fitted up with equal taste and magnificence. The city of London has two club-houses, which, in point of elegance and luxury, may vie with those of the W. end. The number of members in the different clubs may be about 30,000.

Courts of Law.—The Courts of Chancery, Queen's Bench, Common Pleas, and Exchequer (the respective provinces of which are described in the art. ENGLAND AND WALES), occupy apartments on the W. side of Westminster Hall. This hall measures 238 ft. in length by 66 ft. in breadth, and is 110 ft. high. Westminster Hall, ordinarily, is used as a promenade for lawyers and their clients during the sitting of the courts. The lord chancellor sits out of term-time in the hall of Lincoln's Inn. The master of the Rolls sits in the Rolls' Court, Westminster, and in the Rolls' Court in the Rolls' House, Chancery Lane. The vice-chancellors sit in Westminster Hall and in Lincoln's Inn.

The Central Criminal Court, the jurisdiction of which extends to all places within 10 m. of St. Paul's, was established in 1834. Its sittings are held at the Old Bailey, a stone building close to Newgate, once a month, and generally last five or six days at a time. There are two halls, of confined dimensions, in both of which the judges are engaged in trying prisoners during the sessions. The Lord Mayor's Court, of which the recorder of London is judge, will be noticed subsequently. The Court of Bankruptcy is in Basinghall Street, within the city of London, and the Ecclesiastical, Divorce, and Admiralty Courts are in Doctors' Commons, near St. Paul's Cathedral, and at Westminster Hall.

Inns of Court.—The Inns of Court, originally colleges for legal study, are now little more than residences for lawyers, or indeed for all persons who choose to hire chambers in them. They are not incorporated, and cannot, consequently, make bye-laws; but, by prescription, their customs have obtained the force of laws. A law student, before being called to the bar, has now only to be entered as member of one of these inns, and to dine a certain number of times in the common hall, in order to qualify himself for the exercise of his profession. This is termed 'eating' his way to the bar.

Among the chief inns are the Inner and Middle Temple, in the liberty or district so called adjoining Temple Bar, and between the Strand, Fleet Street, and the Thames. This district originally belonged to and took its name from the knights templars; and having, after their downfal, been held in lease by students of the common law, the property, which had come into the possession of the crown, was conferred by James I. on the two societies, and their successors. The Temple Gardens, which have some fine trees, and are well laid out, are skirted by the Thames, or rather the new Thames Embankment. The Middle Temple Hall, 100 ft. in length, the Library, and the Temple Church, are especially worth notice. The latter consists of a circular and a rectangular portion. The former, which is a perfect circle, of three stories, in the Norman style, was erected in 1185; and the latter, in the Early English style, in 1240. This venerable structure was completely repaired and renovated in 1839-42, the original style of its different parts being carefully preserved, at an expense of about 70,000*l.* It is now, in all respects, one of the most interesting ecclesiastical edifices in London. Besides various monuments of the age of the Crusades, it has some of a more modern date, inc. one in honour of the learned and excellent John Seldon, buried within its walls. Hooker, the 'judicious,' author of the Ecclesiastical Polity, was, for six years, one of its preachers. Subordinate to the Temple are Clifford's, Clement's, Lyon's, and New Inns.

Lincoln's Inn is situated between Chancery Lane and Lincoln's Inn Fields. The lord chancellor, as before stated, holds his sittings during a portion of the year in the hall; and the vice-chancellors sit in adjoining buildings. The society erected in the gardens, in 1845, a hall and library, from the designs of Mr. Hardwick. It is in the Tudor style, brick, with stone dressings. The hall is 120 ft. in length, by 45 ft. in width, and 62 ft. in height; the library, 80 ft. in length, 40 ft. in width, and 44 ft. in height, is furnished with a valuable collection of books.

There are, also, Gray's Inn, on the N. side of Holborn, having attached to it Staples' Inn, and Barnard's Inn. Furnival's Inn is subordinate to Lincoln's Inn. Thavies' Inn, and some others, are mere private residences.

Prisons and the Police.—There are about a dozen criminal prisons, the most important of which are the following:—1. Newgate, under the control of the corporation, is a building, the architecture of which is singularly appropriate to and characteristic of its destination. It was a prison early in the 13th century; but the present edifice was erected in 1779, and again repaired after the riots of 1780. This, which may be called the great metropolitan gaol, contains proper accommodation for 300 or 400 prisoners; but, before the meeting of sessions, it has sometimes as many as 1000 or more crowded within its walls waiting for trial; and it then, no doubt, deserves some portion, at least, of the reproaches which have been made against it. In front of this prison all the criminals of London and Middlesex, capitally convicted, suffer the last penalty of the law. 2. City of London Prison, Holloway, erected in 1855. It is a building in the 'castellated style,' and it is said that, 'when mildewed with age,' it will 'present all the appearance of a baronial stronghold of the middle ages.' To unpoetic observers, the structure may appear very ugly. The prison is used as a place of confinement for all prisoners tried at the Central Criminal Court and the London sessions, and convicted within the jurisdiction of the city magistrates. 3. Cold-Bath-Fields Prison, a very extensive brick building, near Gray's Inn Lane, is a house of correction for Middlesex; and contains felons, misdemeanants, rogues, and vagabonds. It is an insulated brick building, containing spacious courts and airing grounds. The classification is good, and the silent system is followed, connected with hard labour. A large treadmill employs 320 prisoners at a time. This prison accommodates upwards of 1,200. 4. The Westminster House of Correction, in Tothill Fields, for criminals from all parts of Middlesex, begun in 1831 and finished in 1834, is surrounded by a lofty wall, with a complete roadway outside. It is built on the panopticon principle, and has a court-yard in the centre 250 ft. in diameter, with prisons round it for 600 persons; but the average number confined is 350. The arrangement of the building is said to be excellent, and the window of the governor's house commands a complete view of all the day-rooms and yards, and of the 2 tread-wheels. Instruction is given to juvenile offenders. The silent system is adopted, and a good classification maintained. 5. The Penitentiary at Milbank, West-

Digitized by Google

minster, built on the panopticon principle, has no peculiar connection with the metropolis, but is for the confinement and reformation of criminals whose sentence of transportation or death has not been executed, or has been commuted. It contains accommodation for 1,120 prisoners, the number of inmates averaging about 600. The building is insulated, and is surrounded by a wall enclosing 18 acres of ground. 6. The Pentonville Prison, Pentonville, is appropriated to the confinement of male prisoners under sentence of transportation. 7. The Surrey County Gaol is in Horsemonger Lane, Newington Causeway. It contains about 250 prisoners, and there is little classification. The top of the building is used as a place of execution. 8. The Brixton House of Correction is exclusively for prisoners sentenced to hard labour at the assizes and sessions, or by magistrates, under summary convictions. Hard labour and the silent system are rigorously enforced.

The principal prisons for debtors are: 1. The Queen's Bench, in the Borough, chiefly used for debtors on process from the Court of Queen's Bench, but also for persons committed for libels and contempts. It is a spacious prison, containing 207 rooms, in which 500 persons have occasionally been confined at once. The 5 & 6 Vict. c. 22 abolished the former practice of granting day rules, and of permitting prisoners to reside within the rules, which comprised a space of nearly 1 sq. m. 2. Whitecross Street Prison, in the street of that name, in the city, is inconveniently built, and said to be badly managed. Its confined extent, when compared with the average number of the inmates, and the disorder prevalent in every part of it, are not a little discreditable to the corporation of London. The prisons for debtors have been comparatively deserted since the changes introduced within the last few years respecting imprisonment for debt. Formerly they were often very much crowded, and persons were confined in them for long periods of years.

A great deal has been effected, of late years, in regard to the improvement of prisons and of prison accommodation; but it seems doubtful whether the chief object of a prison has not been very frequently lost sight of in these philanthropic reforms. The metropolitan police is held to be one of the most efficient in the world, since its reorganisation in 1828–9. Till then, the police of London had the reputation of being the most defective establishment of the kind in Europe. Under the present organisation, there are 13 police offices, 2 of which are in the city, and one in Southwark. These are—

The Guildhall, in the City.	Vincent Square, Westminster.
The Mansion House, do.	High Street, Marylebone.
Bow Street, near Covent Garden.	Great Marlborough Street, Oxford Street.
Clerkenwell, Bagnigge Wells Road.	Worship Street, Finsbury Square.
Hammersmith and Wandsworth, in Wandsworth.	Kennington Lane.
Greenwich and Woolwich.	Union Office, Southwark.
	Thames Police, Wapping.

The first two of these offices are regulated by the city authorities; the rest are under the control of the secretary of state. Magistrates sit every day at each office, to hear and determine cases of misdemeanour and breaches of the peace, as well as to examine and commit for trial all persons accused of felonies, to administer oaths, swear in constables, and perform other magisterial functions. A number of officers are appropriated to each establishment, and a river police is attached to the Thames office.

The reorganisation of the metropolitan police was chiefly effected by Sir R. Peel in 1829. The metropolitan police is dispersed over the whole of London, excepting the city, which is protected by a distinct body, of similar character, but said to be less effective and not so well disciplined. The city police is under the control of the corporation; the other force is governed by two commissioners, who communicate directly with the secretary of state for the Home Department. The metropolitan police numbered 7,191 officers and men on the 1st of January, 1865, and its total cost in the year 1864 amounted to 560,864*l*. The pay of the men is from 19*s*. upwards. The sphere of their duties reaches beyond the metropolis; and comprises, with the exception of the city of London, the whole country within 15 m. of Charing Cross. The expense is defrayed by an assessment limited to 8*d*. in the pound on the parish rates, the deficiency being made up by the treasury. The city, as before said, is not under the charge of the metropolitan police, but is protected by a separate division, organised on the plan, and in imitation of the arrangements of that body, but placed under the city authorities. The city police is divided into six companies, to each of which belong inspectors, serjeants, and constables, and the whole is immediately under the control of a superintendent. All the constables, both of the city and metropolitan police, wear a blue uniform, with the number of each man, and a letter designating the division to which he belongs, on the collar of his coat. They are constantly on duty, day and night; but the force is increased at night.

Waterworks and Sewers.—The supply of London with water was anciently procured from brooks running through the city. The increase of inhabitants made these sources insufficient; while, at the same time, they became less accessible, owing to the encroachment of buildings. To remedy this inconvenience, water was brought by leaden pipes in the 13th century from Tyburn, then a mere country village, into the city, where it flowed into conduits from which the inhab. drew it at pleasure. In the beginning of the 17th century Sir Hugh Myddleton projected, and, despite the greatest difficulties, carried into effect, in 1613, his plan for bringing the water of two copious springs in Hertfordshire to London, by an aqueduct, called the New River, 40 m. in length, including windings. The Thames has long been one of the great sources of supply; and, as early as 1581, water-wheels and other hydraulic machinery were established at London Bridge. These wheels, which at one time raised 45,000 hhds. per day, were wholly removed when the old bridge was pulled down. The greater number, however, of the existing water companies derive their supply from the Thames, the water being filtered in immense reservoirs.

In every street in London there are fire-plugs or cocks, at any of which a copious supply of water should be obtained in a few minutes in case of fire; though it must be admitted that the supply has sometimes, through neglect, been very long delayed, to the great injury of property. Much water is also required in watering the streets and improving the drainage: indeed, scarcely one-half of the supply is used for purposes strictly domestic. Abundant springs of the finest water may be procured in all parts of London, by boring below the clay strata; but no public measures have yet been taken to ensure a supply from this source, or (excepting the New River) from springs at a distance. It is probable, however, that steps will, at no distant period, have to be taken to effect this object.

Digitized by Google

The sewers of London, which began to be constructed as early as 1428, constitute a system of drainage unknown to most modern cities; and, though out of sight and little noticed, in former years, except by engineers, they must, in their new form, excite the astonishment of all who investigate the subject. Their depth is, in all cases, sufficient to drain the deepest cellars in each neighbourhood, and the size of the main branches rivals that of the celebrated Roman Cloacæ.

The gigantic system of new sewers, constituting the main drainage of the metropolis, was completed in 1865, and opened, with some ceremony, by the Prince of Wales, on the 4th of April, of that year. The metropolis, it need scarcely be repeated, stands on the north and south sides of the Thames, and slopes down to the bed of the valley occupied by the river. The old sewers by which the inhabited area was drained ran down the slopes from the upper ground to the lower, and discharged themselves into the stream. Those arrangements, until the execution of the new works, represented the whole system of metropolitan drainage. On the south side of the Thames, houses had been built on such low-lying land that the river sometimes ran into the drains instead of the drains into the river, and the same anomaly was occasionally visible even on the north side when high tides came in. In the best of cases the enormous volume of daily refuse yielded by the capital was poured into a tidal river, and tossed backwards and forwards with the ebb and flow until the whole stream was polluted with corruption. The Thames, in fact, was a great open sewer, running through the centre of the metropolis, and poisoning the atmosphere with its noisome exhalations. It became, therefore, necessary to construct certain main sewers of great length and capacity, by which the contents of the metropolitan drains might be effectually intercepted from the stream. These are now seen in the great sewers which, on different levels, run, like the Thames, from west to east, and so cut the drains of the city at right angles. There are three of these enormous culverts on the north side of the river and two on the south. On the north the three sewers converge at Abbey Mills, near Stratford, and their contents are there thrown, by means of a 'lift,' into what is called the 'Northern Outfall' Sewer, and conducted through that channel into the reservoir at the opening of Barking Creek. On the south side of the Thames, the two intercepting sewers converge in like manner at a point on Deptford Creek, are then merged in an 'outfall sewer' of their own, and so discharge their contents into the southern reservoir at Crossnest. Here are immense steam-pumps, which constantly throw—at the rate of about 24 millions of gallons per diem—the drainage into the river, at a point so far below London as to be beyond the reach of the tide. The total pumping power employed is 2,380 *nominal* horse-power; and if at full work night and day 44,000 tons of coal per annum would be consumed. The sewage on the north side of the Thames at present amounts to 10 million cubic feet a day, and on the south side to 4 million cubic feet per day; but provision is made for an anticipated increase up to 11½ millions on the north side, and 5¾ millions on the south side, in addition to 28½ million cubic feet of rainfall per diem on the north side, and 17¼ million cubic feet per diem on the south side, or a total of 63 million cubic feet per diem, which is equal to a lake of 482 acres, 3 feet deep, or fifteen times as large as the Serpentine in Hyde Park. There are, altogether, about 1,300 miles of sewers in London, and 82 miles of main intercepting sewers. Three hundred and eighteen millions of bricks and 880,000 cubic yards of concrete were consumed and 3½ million cubic yards of earth were excavated in the execution of these main drainage works.

The cost of these stupendous works amounted to little more than 4,000,000*l*. The sum for defraying this expense was raised by loan, and is to be paid off by a 3*d*. rate levied on the metropolis, which produces 180,262*l*. per annum, the rateable value being 14,421,011*l*., and the principal and the interest of the loan will be paid off in 40 years.

Local Government and City Corporation.—The city of London is under the government of the lord mayor, 2 sheriffs, 25 aldermen, 206 common-councilmen, a recorder, and other officers, and is divided for municipal purposes into 26 wards, each of which is under the government of an alderman. The Saxon denomination for the governor of London was *portgraf* or *portreeve*, which, about a century after the Conquest, was changed to mayor. This officer was appointed by the crown till 1215, when the citizens obtained the right of electing their own mayor. The mode of election now followed was fixed in 1476 by an act of common council.

The lord mayor is annually chosen from the body of aldermen, at a court held at Guildhall on Michaelmas Day, and is sworn in to the duties of his office on the 9th of Nov. following. A procession, known as 'the Lord Mayor's Show,' takes place on the occasion, followed by a dinner and ball at Guildhall. In most instances, though not always, the alderman next in seniority to the lord mayor is elected his successor. He must be free of one of the great city companies, and must have served the office of sheriff. The lord mayor is, in theory, second only to the sovereign within the city, and at the sovereign's death he takes his seat at the privy council, and signs before every other subject. His powers are similar to those of a lord-lieutenant of a county, and his authority extends over the whole city and a portion of the suburbs.

The division of the city into wards appears to have been made very early in the 13th century; there were twenty-four wards, which became twenty-five in the year 1393 by a division of the ward of Farringdon. In 1550 a great part of the bor. of Southwark was formed into a ward, and called Bridge Ward Without; but it is now merely a nominal ward, giving a name to the senior alderman, who, on the occasion of a vacancy, is removed to it from his own ward, and is then called 'the father of the city.'

The following is an alphabetical list of the names of the wards, with an indication of their situation, and the number of common councilmen:

1. Aldersgate, on both sides of Aldersgate Street, including the Post-office. Com. coun. 8.
2. Aldgate, at the E. end of the city, includes the E. ends of Leadenhall Street and Fenchurch Street, and Crutched Friars, called Alegate in the old list of 1285, given by Maitland. Com. coun. 8.
3. Bassishaw (corrupted from Basinge's-haugh) includes little more than Basinghall Street. Com. coun. 4.
4. Billingsgate, from Billingsgate Market to near Fenchurch Street. Com. coun. 8.
5. Bishopsgate, both sides of Bishopsgate Street. Com. coun. 14.
6. Bread Street, E. of St. Paul's, and SW. of Cheapside. Com. coun. 8.
7. Bridge Within, London Bridge and Fish Street Hill, includes the Monument. Com. coun. 8.
8. Bridge Without, part of the Borough of Southwark.
9. Broad Street, between Bishopsgate Ward and Coleman Street, includes the Bank; this is apparently the Lodingeber of the ancient list. Com. coun. 8.
10. Candlewick, between Lombard Street and London

Digitized by Google

Bridge, named from Cannon Street, which was formerly called Candlewick Street. Com. coun. 8.

11. Castle Baynard, from St. Paul's to the Thames. Com. coun. 8.

12. Cheap, both sides of the E. end of Cheapside and the Poultry, including Guildhall. This is probably Ward Fori in the ancient list. Com. coun. 8.

13. Coleman Street, includes Lothbury, part of London Wall and Finsbury Circus. Com. coun. 8.

14. Cordwainers, SE. of Cheapside; includes Bow Church. Com. coun. 6.

15. Cornhill, a small ward on both sides of Cornhill, includes the Exchange. Com. coun. 6.

16. Cripplegate, reaches from Wood Street, Cheapside, to the boundary of the city on the N.; it includes Fore Street and the Barbican. Com. coun. 16.

17. Dowgate, between Southwark Bridge and London Bridge, includes Merchant Taylors' School. Com. coun. 6.

18. Farringdon Within, includes St. Paul's Cathedral, part of Cheapside, Newgate Street, and Ludgate Street, and reaches the river near Blackfriars Bridge; this and the following are the 'Lodgate and Newgate' of the old list. Com. coun. 14.

19. Farringdon Without, includes Smithfield, the Old Bailey, the Fleet, part of Holborn, and the whole of Fleet Street. Com. coun. 16.

20. Langbourne, includes Fenchurch Street and a part of Lombard Street. Com. coun. 8.

21. Lime Street, includes the East India House and a small space around it. Com. coun. 4.

22. Portsoken, Eastward of Houndsditch and the Minories. Com. coun. 8.

23. Queenhithe on the River, W. of Southwark Bridge. Com. coun. 6.

24. Tower, from Tower Hill to Billingsgate, includes the Custom House. Com. coun. 8.

25. Vintry, on the Thames, and both sides of Southwark Bridge. Com. coun. 6.

26. Walbrook, S. of the Mansion House, includes the Mansion House, and the church of St. Stephen's, Walbrook. Com. coun. 6.

The aldermen are chosen by such householders as are freemen, and pay an annual rent of 10*l*. Each alderman is elected for life, and has the direction of the business of his ward, under the superintendence of the lord mayor. They are all justices of the peace within the city. The sheriffs are elected every year, on Midsummer Day, by the corporation and freemen, and are sheriffs of the county of Middlesex, as well as of the city of London: they enter on their duties, and are sworn in at Westminster on Michaelmas Day. The common councilmen are chosen by the householders in all the wards except Bridge Without The common councilmen are the representatives of the inhabitants in the 'Court of Common Council,' which is composed of the lord mayor, aldermen, and common councilmen. This court disposes of the corporation funds, makes laws for the regulation of the city, and nominates certain of the city officers. Its sittings are usually public, and its title 'honourable.'

It must, however, be admitted that here, as in most other great towns, civic dignities have been long declining in the public estimation. The principal bankers, merchants, and tradesmen, all but uniformly decline serving in any civic office, and rather than do this will submit to pay very heavy fines. In consequence, the offices in question have been filled, for years past, by an inferior, though still very respectable class of citizens. It has been customary, on certain occasions, to advance lord mayors, and other city functionaries, to the rank of knights and baronets.

The livery consists of freemen of the city, who are also free of one or other of the city companies. Each of these companies was, at its formation, intended to comprise the different individuals within the city, properly so called, engaged in the peculiar department of industry called by its name; and had power to enact bye-laws, and to lay down regulations for the government of the trade. Thus, no one could commence business within the city of London as grocer, mercer, or goldsmith, without being free of the grocers', mercers', or goldsmiths' companies. This freedom could only be acquired by inheritance, serving an apprenticeship to a freeman, or paying a fine, or otherwise, as the company might choose to order; and, after admission, all individuals had to conform in the conduct of their business to the rules and regulations laid down by the company. But the inconveniences of this system gradually became obvious; and it has, in consequence, been so much modified, that the privileges of the different incorporated companies no longer oppose any obstacle to individuals from distant parts of the country establishing themselves in business within the city, nor interfere in any degree with the management of their concerns. In fact, any one who pleases may now purchase at Guildhall a licence entitling him to trade within the city for 5*l*. without being free of, or having anything to do with, any company. The city companies have, in truth, become charitable rather than political, or even municipal, institutions. Some of them have a great deal of property. The principal companies obtained very large grants of land in Ulster during the reign of James I.; and most of them are trustees for sums of money and other property bequeathed by benevolent individuals. They expend their revenues partly in festivities, but principally in pensions to widows and decayed brethren, and the support of schools. There are in all 91 companies, of which 40 have halls, where they transact business, keep their records, and hold festivals. Some of these halls are very fine structures, such as that of the goldsmiths in Foster Lane, and that of the fishmongers at London Bridge.

The following 12 are called the *Great Companies*, and from one or other of them the lord mayor must be elected:—

Mercers.	Merchant Taylors.
Grocers.	Haberdashers.
Drapers.	Salters.
Fishmongers.	Ironmongers.
Goldsmiths.	Vintners.
Skinners.	Clothworkers.

There are about 12,000 liverymen, in whom, previously to the passing of the Reform Act, in 1832, the right of returning the 4 mems. of the H. of C. for the city was exclusively vested. A common hall is an assembly of the liverymen, called together at the requisition of a considerable number of their body: the lord mayor is the president by right of office.

The Guildhall, where the corporation meetings, festivals, and common halls are held, stands at the N. end of King Street, Cheapside. Having been much damaged in the great fire of 1666, it was replaced by the present edifice, constructed of the materials of the old building. The front, added in 1789, is in a heterogeneous style. The great hall, 153 ft. in length, by 48 in breadth, and 53 in height, built and paved of stone, is capable of accommodating 6,000 persons. At each end of the hall is a magnificent painted glass window in the pointed style. In the hall are statues erected by the corporation in honour of Lord Chatham and his son the Right Hon. William Pitt, Nelson, and Alderman Beckford. On the pedestal of the latter is inscribed the famous reply made, or rather said to have been made, in 1770, by Beckford, who was then lord mayor, and one of the mems. for the city, to the answer of his majesty (George III.) to an address and remonstrance of the common council. At the W. end of the hall are the two wooden giants called Gog and Magog, the subject of so many nursery

Digitized by Google

tales. In the council chamber, where the lord mayor, aldermen, and common council hold their courts, is a statue of George III. by Chantrey; it has also a library containing books of reference, relative chiefly to the history of London and the affairs of the city, and various other rooms for the use of the corporation.

The city has its peculiar courts of law, most of which are held in the Guildhall. The lord mayor's court, for actions of debts and trespass, and for appeals, is presided over by the recorder of the city. The sheriffs hold courts of record four days every week. The chamberlain's court, held daily, decides disputes between masters and apprentices, and admits qualified persons to the freedom of the city. Courts of petty session for small offences are held daily at the Mansion House, by the lord mayor and an alderman, and at the Guildhall by two aldermen. There are also several minor courts.

The revenues of the corporation of London are very large, amounting to nearly 200,000*l.* per annum. These large funds are derived from rents of houses and land, market tolls, bequests, interest on government securities, and a few other sources. The chief items of expenditure consist of salaries to municipal officers, maintenance of police and prisons, corporation entertainments, purchase of securities, and payment of debts. The lord mayor has 8,000*l.* a year allowed him to support the dignity of his office, and a splendid official residence, the Mansion House, at the E. end of the Poultry, nearly opposite the Bank. This is a large structure, begun in 1739, and finished in 1753, with a Corinthian portico on a rustic basement. The grand or Egyptian Hall, the ball-room, and the saloon, are magnificent apartments, but some of the private apartments, occupied by the lord mayor, are but indifferently lighted. The plate used at civic entertainments belongs to the corporation, and is very valuable.

The government of that immense district of the metropolis not within the city was, till the year 1855, in a very unsettled state. It was placed upon a better footing in this year by the act 18 and 19 Victoria, cap. 120, known as the Metropolis Local Management Act. By this law the administration of the various parishes was made over to vestries and district boards, the vestries in the larger parishes forming corporate bodies. The number of vestries so constituted is 23, and the number of district boards 13; but, as a great centralised authority, there is a Metropolitan Board of Works, consisting of 45 members. Three members of this board are elected by the common council for the city, two members by each of the six larger parishes, one member by each of the 17 smaller parishes, and one member by each of the 13 districts. The chairman of this board has a salary of 2,000*l.*, and is appointed by the secretary of state from among three candidates presented by the Metropolitan Board.

Every vestry and district board is bound to appoint one or more legally qualified medical practitioners of skill and experience, called 'medical officers of health,' to inspect and report upon the sanitary state of the parish or district; to ascertain the existence of diseases, and especially of epidemics; to point out the most efficient mode of preventing their spreading; and to have regard to the ventilation of churches, chapels, schools, lodging-houses, and other public buildings. Further, every vestry and district board must appoint such number of persons to be 'inspectors of nuisances' as may be thought fit.

The Metropolitan Board of Works has extensive duties and powers. Its higher executive has the control of all the main sewers, which were previously vested in commissioners. The Metropolitan Board may regulate the naming of streets and the number of houses, and may alter the name of any street. This is, indeed, a very needful power; for great is the perplexity with the Charlotte Streets, the George Streets, and the King Streets, of every quarter. The Metropolitan Board has also large powers to make improvements in widening streets, and facilitating the traffic of various parts of the capital.

The expenses incurred by the vestries and district boards under their various powers are levied by rate, distinguishing the three several heads of sewers rate, lighting rate, and general rate. The Metropolitan Board levies a rate upon the same principle as the county rate. There is a general power to district boards and vestries to borrow, upon the credit of the rates, any sums necessary for carrying on their works.

Historical Notice.—Nothing is known of London previously to the invasion of the Romans; and it may be doubted, from the silence of Julius Cæsar, whether it then existed, or, at all events, whether it had attained to any considerable magnitude. But, however this may be, it is clear, from the statement of Tacitus (Annal., lib. xiv. cap. 33), already referred to, that so early as the reign of Nero it was an important emporium, though not distinguished by the title of colony; and it is doubtful whether it ever attained to that distinction.

After the Romans had left Britain, and the Saxons had divided the country among themselves, London is supposed to have become the capital of the E. Saxon kingdom. On the introduction of Christianity into England, it was one of the first places to embrace the new faith, and early became a bishop's see. St. Paul's, and St. Peter's in Westminster, were first founded about this time. In the paucity of intelligence concerning the period of the heptarchy, all we hear of London is, that it suffered severely from fire in 764, 798, and 801, on each of which occasions it is said to have been nearly destroyed. As soon as England had been united under one monarch, it appears to have become the metropolis of the empire; and, in 833, a wittenagemote, or parliament, was held in it to consult on the best means of repelling the Danes, who were ravaging the eastern counties. It was, however, sacked by the Danes in 839; in 982 it was nearly destroyed by fire; and in 994 the inhab. purchased a temporary remission from the attacks of the Danes, by paying them a high ransom.

At the Conquest, London submitted to William, and soon after received a charter in the English language, the original of which is still preserved. Within the 60 years following the Norman Conquest it suffered severely by fire on five different occasions; but, being then built principally of wood, it was easily repaired from the timber furnished by the extensive forests of Islington and Hornsey, which still existed when Fitzstephen wrote in the succeeding century. London was then unpaved, and, according to the statement of contemporary historians, the rafters of the roof of Bow Church, which were blown off by a hurricane in 1091, struck into the ground to a depth of 20 ft. The same hurricane caused so high a tide in the Thames, that the wooden bridge, which had stood 200 years, was carried away by the stream. On the accession of Henry I. in 1100 a new charter was granted to the city, which restored its ancient privileges, as they existed before the Norman Conquest, relieved the inhab. from many oppressive services, such as compulsory entertainment of the

Digitized by Google

king's household, and abolished several barbarous customs of the Saxon period. The citizens acquired by this charter the privilege of choosing their own magistrates. The Norman monarchs seldom respected corporate privileges, even when conceded by themselves; but still this charter was valuable as furnishing a standard to which to refer in future disputes with the crown, and it is said to have served as the model from which Magna Charta was taken. About the middle of the 12th century it was determined to build a stone bridge over the Thames. The first wooden bridge having, as already stated, been carried away in 1091, was replaced by another, which was burned down in 1136. The bridge erected instead of the latter became so ruinous in less than 30 years, that it was thought a stone bridge would be less costly in the end than the continual repairs required to keep up these unsubstantial, though cheaper structures. The latter, begun in 1176, and finished in 1209, was an extraordinary work for the time, as it remained standing for above six centuries, till the year 1832, though frequent alterations, additions, and repairs materially impaired its identity. Three years after its erection a dreadful loss of human life was occasioned by a fire on the bridge, described in Stow's Chronicle:—'The tenth of July at night the city of London upon the S. side of the river of Thames, with the church of our Ladie of the Canons in Southwarke, being on fire, and an exceeding great multitude of people passing the bridge, sodainely the N. parte, by blowing of the S. winde, was also set on fire, and the people which were even now passing the bridge, perceiving the same, would have returned, but were stopped with fire, and it came to passe, that as they protracted time, the S. ende was fired, so that people thronging themselves betwixt the two fires, there came to aide them many ships and vessels, into the which the multitude so undiscreetly pressed, that the ships being drowned, it was saide, there were destroyed about three thousand persons.' About this time an order was made by the court of aldermen that no house should be built without party walls 3 ft. in thickness, and 16 ft. in height. This order, dated in 1191, was doubtless intended to obviate the recurrence of the fires by which the city had been often partially destroyed; but it was little, if at all, attended to, and is interesting principally from its being the first document in which the chief magistrate of London is designated lord mayor. He had hitherto been called chief bailiff.

In the year 1211 the citizens began to form a deep ditch, 200 ft. in width, without the city wall on all sides, as a means of defence against King John. In 1218 the forest of Middlesex was cleared, and the citizens of London were permitted to purchase land and build thereon. Thus was begun that part of the metropolis which stands N. of the city, and is now so populous. In 1221, Henry III. laid the first stone of the present Westminster Abbey. In 1236 water pipes began to be laid down in the city, which had previously been supplied with water from wells and rivulets running through it into the Thames, the names, at least, of some of which are still preserved. The pipes now referred to brought a copious stream from springs at Tyburn, a village on the site of the present Oxford Street, near its W. end, to the city of London. Various leaden cisterns, named conduits, were afterwards constructed for the reception of the water, whence it was drawn by the inhabitants. In 1282, during a great frost, such masses of ice were brought down the Thames, that 5 arches of London Bridge were destroyed. In 1304 the first recorder was appointed.

Early in the 14th century coal began to be imported into London; and a notion having got abroad that its smoke was injurious to the public health, parliament petitioned the king, Edward I., in 1316, to prohibit the burning of coal, on the ground of its being an intolerable nuisance. But experience served, in no very lengthened period, to dissipate this groundless prejudice. The imports of coal have continued progressively to increase, and its ample supply has been one of the circumstances that have contributed most to the unexampled magnitude of the city, and the comfort of the inhabitants.

In 1328, in consequence of the facility with which felons made their escape from London across the bridge into the adjoining village of Southwark, which, until then, was beyond the mayor's jurisdiction, Edward III. granted a charter assigning this village to the city for ever, and empowering the city magistrates to act in Southwark as in London.

In 1349, the kingdom was scourged by a pestilence, which is said to have raged with extreme severity in London. The city was again visited by the plague in 1361; and it is worth notice, that this visitation was ascribed, and probably with good reason, to the corruption occasioned by the slaughter of cattle and sheep in the city. In consequence, his majesty, Edward III., issued a proclamation, forbidding the slaughter of all animals nearer than Stratford and Knightsbridge. But the butchers, tavern-keepers, and others, interested in the support of the Smithfield nuisance, had then influence enough to set at naught the authority of the monarch, and to perpetuate their abomination.' (Stow's Survey, i. 2, ed. 1754.)

In 1381 the rebellion of Wat Tyler, and his death by the hands of the lord mayor, occasioned the addition of the dagger to the city arms, where it still appears. During this century various reforms were effected in the cleaning and paving of the streets. But an effectual stop was put to these and all other improvements in 1392, when, in consequence of the refusal of a loan of 10,000*l.* to King Richard by the corporation, the mayor, sheriffs, aldermen, and principal citizens were imprisoned, heavy penalties exacted, the city franchises abrogated, and the courts removed to York. Heavy bribes effected a removal of several of these grievances, but the city did not recover its proper influence till the accession of Henry IV.

In the following century the progress of improvement was still more rapid. Lamps were introduced in 1416. Holborn, a part of the Strand, and other principal thoroughfares, were paved; additional conduits and water-pipes were laid down; and wooden houses began to be replaced by others of brick, made in Moorfields. Stocks, for the punishment of disorderly persons, were erected in the different wards. Guildhall, Leadenhall, and Crosby House, Bishopsgate Street, were built in the 15th century.

In the 16th century the advance was much greater. An unusually long exemption from those civil wars which had, under the Plantagenets, inflicted great injury on London, and the kingdom generally, gave leisure to introduce those improvements which distinguish a modern town from a town of the middle ages. The city watch was improved, various nuisances were removed, and street paving became more general. The removal of monasteries had also a great effect in improving London: 54 large and many smaller establishments made way for factories, schools, charitable asylums, and hospitals. St. James's Palace was built, the park was laid out, and many new buildings were erected in Westminster. The

Digitized by Google

two cities were now first joined by a number of mansions of the nobility on the N. side of the river; one of which, Northumberland House, still keeps its place. The streets S. of the Strand indicate by their names the site of other mansions that have disappeared. The Royal Exchange was built, and commerce began to flourish. Towards the end of this century water began to be conveyed by machinery into private houses, and the New River was projected.

In the 17th century, London assumed its present form, with the exception of the part destroyed by the great fire of 1666. Spitalfields was covered with houses; and before 1666 the space N. of the Strand as far as Holborn, and from Temple Bar to St. Martin's Lane, had been extensively built upon. The parts of Westminster also, from Charing Cross to St. James's Palace, began to have the appearance of a town. The New River was completed, and many houses were supplied with water. Sewers were dug, smooth pavements were laid down for foot passengers, and hackney-coaches became general.

But all these were only imperfect palliatives of nearly incorrigible disorders. The narrow, dirty, and filthy state of the streets and houses of the city in the 17th century, constantly engendered the plague, and from its ravages the city was then rarely, if ever, exempted. It would have been extremely difficult to have introduced a different and improved state of things by legislative or municipal regulations, but what they could not effect was done by widely different means. On the 2nd of Sept. 1666, the great fire broke out in Pudding Lane, near the spot were the Monument was subsequently erected in commemoration of the occurrence. It raged till the 5th, when it ceased, rather by pulling down houses in the line of its course, than by the success of the exertions directly to extinguish the flames. The ruins, covering 336 acres, comprised 13,200 houses, 90 churches, and many public buildings; the property destroyed being estimated at 10,000,000*l*. Though productive of great loss, and of much temporary distress and suffering, this conflagration was, in its results at least, of signal advantage. Its destructive agency was required to get rid of the vast mass of old wooden houses, and narrow and filthy lanes and courts, that had for centuries been the permanent abode of the plague and other pestilential diseases. No doubt it must ever be regretted, that the designs of Sir Christopher Wren for the renovation of the city were not adopted. But notwithstanding the numerous defects of the new plan, it was a vast improvement on that by which it had been preceded. Though still too narrow, the streets were materially widened; the new houses were constructed of brick instead of wood; party walls were introduced; the old practice of making each story project over that immediately below was abandoned; obstructions and filth of all sorts were removed; and the sewerage and pavement of the streets were vastly improved. A fire which happened in Southwark ten years afterwards, afforded an opportunity for carrying similar improvements into that part of the metropolis. The population and trade of the city now increased more rapidly than before. The revocation of the edict of Nantes occasioned the immigration of a great number of French, who settled in Spitalfields and St. Giles's. The parishes of St. Anne and St. James were formed, the district called the Seven Dials was built, Piccadilly began to extend W., and Soho and Golden Squares were laid out. St. Paul's Cathedral was almost completed; the parish of Wapping was formed E. of the city; the Post Office was instituted; and several miscalled asylums (such as Alsatia and the Mint), where robbery and crime had been protected, were abolished.

From this period the increase of London and the progress of improvement continuously advanced. In the early part of the 18th century an act was passed for building fifty new churches in and about the metropolis, most of which were completed within a few years, and some of them are still among its ornaments. Houses sprang up on every side; and, by the middle of the century, the W. end of the town, as far as Hyde Park, became a compact mass of buildings, reaching beyond Oxford Street on the N., and extending E. from Portman Square, across Tottenham Court Road, past Montague House and Gray's Inn Gardens, through Clerkenwell, Finsbury Square, Spitalfields, and Whitechapel to Wapping. Before this time water-works had been formed at Chelsea in aid of the supply furnished by the New River. Sewers had become more general, lamps had been fixed in all the principal streets, the Bank of England and Westminster Bridge were built, St. Paul's completed, and Fleet Ditch arched over. In the last half century old Blackfriars Bridge—taken down in 1865—was built, the houses encumbering London Bridge were removed, the Mansion House was finished, and Somerset House erected. At the same time, many unsightly and inconvenient buildings were removed; lamps were much increased in number, and lighted during the whole night; raised footways became universal, and the shops, which before were mere stalls, assumed a size and splendour evincing the wealth of their occupiers, and greatly contributing to the ornament of the town.

The citizens of London have, generally speaking, been distinguished by their orderly behaviour and respect for the laws. In 1780, however, the peace, and even, in some degree, the existence of the metropolis, were compromised by the excesses of the mob. Certain concessions made in the course of the previous year to the Roman Catholics, had provoked a good deal of religious excitement in all parts of the kingdom. The contagion spread to London; and the weakness of the government, and the folly, or rather madness, of Lord George Gordon and other leaders of the ultra Protestant party, led to a dangerous riot. The mob were, in fact, for about two days, masters of the city. They took possession of the prisons, and turned the inmates out of doors; destroyed the chapels of the ambassadors of the different Catholic powers; many private houses, including that of Lord Mansfield, were plundered and set on fire; a great distillery belonging to a Catholic firm shared the same fate; and an attack was made on the bank, which, however, was happily repelled. At length, this formidable riot was effectually put down, though not till a considerable number of the rioters had been killed and wounded. Since this disgraceful epoch, the peace of the city has not been seriously endangered; and the troops in and about town, added to the effective police force that now exists, seem quite adequate, under ordinary circumstances, to ensure the public tranquillity and the safety of the peaceable part of the community.

During the present century London has made great advances. Within this period eight bridges have been built, extensive docks have been excavated, gas has been introduced into every street and alley; a gigantic system of drainage has been completed; steam, on the river, the sea, and on railways, has given it an almost unlimited power of intercourse with every part of the kingdom and of the world; new and handsome markets have been erected; great thoroughfares, lined with

Digitized by Google

elegant shops, have been formed; and wide lines of communication have been opened through close and densely crowded neighbourhoods. Several new parks have been laid out; an improved police has given additional security to person and property; abundant supplies of water have been furnished to every separate dwelling; and the formation of spacious cemeteries in the suburbs and at longer distances from London, has led to the disuse of interments within the town. At the same time the establishment of colleges and proprietary schools has increased the facilities for procuring good education; the formation of post-office savings' banks, by affording a safe and convenient place of deposit for the smallest savings, has tended to diffuse habits of economy among the lower classes; while the institution of a National Gallery and School of Design has done something to improve the national taste, and to add to the intellectual pleasures of the inhabitants of the greatest city in the world.

LONDONDERRY, a marit. co. in the N. of Ireland, prov. Ulster, having N. Lough Foyle and the Atlantic Ocean; E. Antrim, from which it is separated by the Lower Bann and Lough Neagh; S. Tyrone; and W. Donegal. Area, 513,388 statute acres, of which 136,038 are unimproved mountain and bog, and 9,565 water, being mostly included in the portion of Lough Neagh, belonging to this co. Surface in some parts mountainous and uneven; but there is, notwithstanding, a great extent of low, fertile ground. With the exception of lands belonging to the church and to corporations, the entire property of this co. was granted by James I. to twelve of the principal London companies, from whom most part of the land is now held, partly under terminable, and partly under interminable leases. Farms vary in size from 2 to 200 acres, but the average may be from 5 to 20 acres. 'Where there has been a perpetuity or a long lease, it is *split*; that is, the children are settled upon divisions of the father's farm; by which means leases of 40 acres come to be parcelled, in two or three generations, into patches of 4 or 5 acres. It seems as if the newly let lands were disposed of under some similar system of parcelling. I could give instances where whole districts are subdivided into patches of 6 or 7 acres, and rarely can boast a farm of 12 or 14.' (Sampson's Survey of Londonderry, p. 249.) Some landlords have exerted themselves to counteract this wretched system, but hitherto without much effect. Agriculture is in a very backward state, though in recent years some improvements have been effected. Oats, potatoes, and flax are the principal crops, but a good deal of wheat is also raised. Condition of the small farmers and cottiers very unprosperous. Various minerals have been discovered, but they are of no great importance. The linen manufacture was, a few years ago, widely diffused, but has latterly been a good deal contracted, the mill-spun yarn being cheaper and better than that spun by handwheels. Exclusive of the Bann, the principal rivers are the Foyle, Faughan, and Roe. Principal towns, Londonderry, Coleraine, and Newtown-Limavady. The co. is divided into 6 baronies and liberties, and 31 parishes; and sends 4 mems. to the H. of C., being 2 for the co., 1 for Londonderry, and 1 for Coleraine. Registered electors for the co., 5,512 in 1865. At the census of 1861, the co. had 33,645 inhab. houses, 36,070 families, and 184,209 inhab., while in 1841, Londonderry had 38,657 inhab. houses, 41,114 families, and 222,174 inhab.

LONDONDERRY, or DERRY, a city, parl. bor., and river-port of Ireland, cap. co. of same name, and a co. by itself, situated on the W. bank of the Foyle, about 5 m. above where it falls into Lough Foyle, 121 m. N. by W. Dublin, on the Irish North Western railway. Pop. 20,153 in 1861. The city was originally confined to the hill on which the greater part of it still stands; and which, from its projection into the river, is called the 'Island of Derry.' This portion is surrounded by the old city walls, but it is now rapidly extending beyond its former limits, particularly along the river towards the Lough. There is also a suburb on the opposite bank of the river, called Waterside. The communication between the latter and the city is kept up by means of a wooden bridge, 1,068 ft. in length, and 40 ft. wide, erected in 1789 at an expense of above 16,000*l.* and rebuilt in 1814–15 at a further cost of 16,801*l.* Derry is well built; many of the houses in the main streets within the walls are old-fashioned, with high pyramidal gables; but many modern mansions have been erected in this part of the town; and, without the walls, rows of mud cabins have been superseded by respectable houses. The principal city streets are broad and clean, well paved and well lighted; some of them, however, are inconveniently steep, and there are many narrow lanes and closes. In the centre of the city is an open square space, called the Diamond, from each side of which a handsome street leads to one of the four city gates. The summit of the hill is crowned by the cathedral, court-house, and bishop's palace.

The cathedral, which is also the parish church, was built in 1633; it is a large, handsome, Gothic structure, 240 ft. in length, and has a tower and spire 228 ft. high, erected in 1778; but this having become dangerous, was taken down in 1802, and was soon after rebuilt, with the addition of Gothic pinnacles. The view from the top is very fine. In the interior is a handsome monument to Bishop Knox, and in it also are displayed the colours taken at the siege of Derry. The bishop's palace is a large plain building, with extensive pleasure grounds. There are two other Protestant episcopal places of worship, the chapel of ease and the free church. The latter, which is without the city, was built in 1830, by Bishop Knox, and was intended for the use of the poorer classes, but it is no longer confined to them. There is also a R. Catholic chapel, and places of worship for Presbyterians, Primitive and Wesleyan Methodists, Seceders, Covenanters, and Independents. Among the public buildings, exclusive of churches, and other ecclesiastical edifices, may be specified the Corporation Hall, in the centre of Diamond Square; it was originally constructed in 1692, but received so thorough a repair in 1823, as to be tantamount to a re-erection. The court-house, adjoining the cathedral, erected in 1813, at an expense of 30,480*l.*, is a spacious and a fine building, partly constructed on the model of the temple of Erectheus at Athens. The new gaol is a very extensive structure, being 242ft. in front, by 400 ft. in depth; it is built on the radiating or panoptic principle, and cost above 30,000*l.* Among the chief ornaments of the city is the fluted column, erected, in 1827, in honour of the Rev. George Walker, its heroic defender. It stands on the central W. bastion, and is a well-proportioned pillar, 81 ft. in height, bearing a statue of Walker, 9 ft. high. It cost 4,200*l.*, raised by subscriptions.

The diocesan school, called Foyle College, stands on an eminence near the river; it is a plain but handsome building, erected in 1814, having accommodations for 80 resident pupils; it was built by subscriptions from the bishop of the diocese, the Irish Society, and other sources, and is maintained by similar means: the head-master's salary, from

Digitized by Google

these sources, is about 200*l.* per ann. There is a parish school connected with the church, for the education of 100 boys and 100 girls. The Presbyterian congregation also supports a free school. A school called St. Columb's national school, was established by the R. Catholic bishop and clergy, but it is now under the National Board of Education. In 1829, a Mr. John Gwynn left the munificent sum of above 40,000*l.* for the education of as many boys as the funds will afford in the useful parts of a good English education; and, exclusive of the above, there is an infant school, and a number of Sunday and other schools. Templemoyle Agricultural Seminary, founded in 1827, is within 5 m. of the city. The building is fitted to accommodate 80 boarders, and the farm attached contains 172 acres. The institution is said to be well managed. Among the charitable institutions is the district lunatic asylum for the counties of Londonderry, Donegal, and Tyrone; it was opened in 1829, and cost 25,678*l.*; it can accommodate about 190 patients. Here is also an infirmary and fever hospital, a dispensary, a charitable loan fund, a mendicity association, and a clergymen's widows' fund, with several minor institutions of a similar description. The workhouse for Derry union, opened in 1840, has accommodation for 1,100 inmates. Among the literary itstitutions is the Literary Association, with a reading-room and a good library; the Literary Society, in which lectures are given, and discussions take place; a news-room; and a mechanics' institute.

The walls or ramparts by which the city proper is surrounded remain nearlyin their original state, except that the ditch has been filled up. They afford a fine broad walk all round the city.

Londonderry was originally granted by Edward II. to Richard de Burgh, earl of Ulster, but the late corporation held its privileges under a charter granted by James I. in 1613. The government of the city is now vested in a mayor, 3 aldermen, and 18 councillors. The city sent 2 mem. to the Irish H. of C.; and, since the union, it has sent 1 mem. to the Imp. H. of C. Previously to the Reform Act the right of voting was in the burgesses and freemen. Registered electors 844 in 1865. The mayor and aldermen, who have filled the office of mayor, are justices of the peace within the liberties. The mayor and recorder hold a court of record every Monday, for pleas to any amount. A court of general sessions is held quarterly, one of petty sessions weekly. The assizes for the county and city, and the general sessions for the county, are held here twice a year.

The revenue of the corporation, arising from the tolls of the bridge, and dues on tonnage, quayage, &c., amounted some time ago to about 7,000*l.* a year; but, owing to the expense of improvements, mismanagement, or some other cause, the corporation became involved in difficulties, and their property has since been so reduced that it produces only 663*l.*

Manufactures are not very considerable. There are, however, 2 flax spinning mills, several flour mills, 3 distilleries, 2 breweries, 2 foundries, with rope works, tan-yards, &c. There were here formerly a sugar-house and a glass-house, but these are now relinquished. Some table-linen is manufactured. A valuable salmon fishery is carried on in the river and in Lough Foyle.

The trade of Londonderry is very extensive, and is increasing. Its fine river makes it the emporium of a large extent of country, and it is to this that its great commerce is principally to be ascribed. Its exports, like those of most other Irish towns, consist principally of agricultural produce, but a good deal of linen is also shipped from the port. The number and tonnage of vessels registered as belonging to the port, on the 1st of January, 1864, was as follows:—Sailing vessels under 50 tons, 6 of 176 tons, and over 50 tons, 25 of 8,440 tons; steamers, 6 of 1,358 tons. Among the exports, corn, provisions, and eggs are the most important. The imports consist principally of manufactured goods and haberdashery; iron, sugar and tea, timber, wine, coal, glass, and earthenware. A great portion of the increase in the trade of the port has taken place in recent years, owing chiefly to the establishment of steam-boats, which now ply regularly between the city and Glasgow and Liverpool.

The gross customs' revenue collected at Londonderry in 1844 amounted to 105,830*l.*; in 1848 to 104,991*l.*; in 1859 to 128,184*l.*; in 1861 to 129,015*l.*, and in 1863 to 116,645*l.*

Lough Foyle is properly the outer harbour of Londonderry. It is a triangular basin, about 18 m. long, and 10½ m. where widest; but a great part of it is occupied by sand-banks and mud-flats. The navigable channel stretches along the Donegal or Innishowen shore; and, by following it, the largest men-of-war reach the anchorage at Moville, while merchantmen of 500 tons, without difficulty, ascend to the city quays, 5 m. above the lough and 23 m. from the sea. The river is navigable by barges from the city to St. Johnstone, and there is a canal from the latter to Strabane. A portion of the wooden bridge at the city is constructed so as to open and admit the ascent and descent of vessels.

Derry was colonised and fortified in the reign of James I. by the London companies, who had purchased large tracts of the confiscated estates of the Earl of Tyrone; at which period it took the name of Londonderry. It is famous in Irish history for the memorable siege it sustained in 1689 against the forces of James II. Though ill fortified, and without any disciplined troops, the heroism of the citizens, and the enthusiasm inspired by their brave leader, the Rev. George Walker, enabled them to repel all the attacks of the enemy, and to sustain the more dreadful sufferings occasioned by the pressure of famine. The besiegers lost 8,000 men in the course of the siege, which was raised on the 105th day. Derry continued, for a lengthened period after this epoch in its history, to be, as it were, the head-quarters of Protestantism, or rather of Orangeism, in the N. of Ireland; but even in Derry the Catholics now greatly outnumber the Protestants.

LONG ISLAND, an island on the E. coast of the U. States, forming part of the state of New York, between lat. 40° 34′ and 41° 10′ N., and long. 72° and 74° N., being separated from the continent on the N. by Long Island Sound, and on the E. by East River, New York Harbour, &c. Its length from SW. to NE. is about 120 m., its breadth varying from 10 to 20 m. Surface mostly a level plain, broken only by a range of hills in the N., extending for about 60 m., with an elevation varying from 100 ft. to 400 ft.: among these are Brooklyn, and other heights memorable in the revolutionary war. The soil of the plain is chiefly sandy or loamy. Long Island is not well watered; but in many parts it is well suited for raising corn, particularly maize, the climate being much milder than that of the adjacent mainland. The island has numerous bays and inlets, the principal being Sag Harbour, in the NE.: a great many smaller islands surround its shores. It is divided into 3 counties: Brooklyn, Bedford, Flatbush, N. Hampstead, River-head, and Jamaica are its chief towns.

LONG ISLAND SOUND, a strait of the At-

Digitized by Google

lantic, between Long Island on the S. and the states of Connecticut and New York on the N. In the greater part of its extent it is a noble expanse of water with bold shores, and many commodious havens on either side. But W. of the promontory called Lloyd's neck, the channel becomes rocky, and much interrupted by islets; and a few miles above New York is the dangerous pass of *Hell-gut*, where the flow and ebb tide form cataracts and vortices, sufficient to dash to pieces or engulph large vessels. This formidable strait may, however, be passed with the greatest ease either at high or low water.

LONGFORD, an inland co. of Ireland, prov. Leinster, having N. Cavan and Leitrim, E. Westmeath, and W. Roscommon, from which it is separated by the Shannon. Area 257,222 statute acres, of which 55,247 are unimproved bog and mountain, and 15,892 lakes. The arable soil is, for the most part, level and fertile. Property mostly in large estates. Tillage farms small, the state of agriculture and the condition of the occupiers being much the same as in the adjoining cos. Grazing, however, is extensively carried on. The co. is divided into 6 baronies and 23 parishes; and sends 2 mems. to the H. of C., both for the co. Registered electors, 2,767 in 1865. At the census of 1861, the co. had 13,030 inhab. houses, 14,032 families, and 71,694 inhabitants; while, in 1841, it had 19,195 inhab. houses, 20,579 families, and 115,491 inhab.

LONGFORD, an inland town of Ireland, cap. of the above co., prov. Leinster, on the Camlin, an affluent of the Shannon, 65 m. NNW. Dublin, on the Midland Great Western railway. Pop. 4,535 in 1861, against 4,966 in 1841. Longford has a large market for grain; great quantities being exported by the Royal canal, a branch of which comes to the town. It has a par. church, a R. Cath. chapel, meeting houses for Presbyterians and Methodists, a market-house, the co. court-house, prison, infirmary, and dispensary, with large cavalry and artillery barracks. The corporation, which, under a charter of Charles II. in 1657, consisted of a sovereign, 2 bailiffs, 12 burgesses, and a commonalty, sent 2 mems. to the Irish H. of C. till the Union, when it was disfranchised. The county assizes and general sessions are held here; and courts for petty causes are held on Mondays and Saturdays. It is a constabulary station. Some linen is manufactured; and there is a tannery, a brewery, and a distillery; but the great business of the town consists in its trade in corn and other raw produce. Markets on Wednesdays and Saturdays: fairs on March 25, June 10, Aug. 19, and Oct. 22.

LONGOBUCCO, a town of South Italy, prov. Cosenza, 19 m. ENE. Cosenza. Pop. 8,989 in 1862. The town lies in a deep valley, very little cultivated, and the inhabitants are chiefly employed in working metals and burning charcoal. The horses for hunting in Naples are bred in the neighbourhood.

LONS-LE-SAULNIER, a town of France, dép. Jura, of which it is the cap., in a deep valley, 50 m. SE. Dijon, on the railway from Besançon to Macon. Pop. 9,862 in 1861. The town is generally well built, clean, and furnished with numerous public fountains, one of which, in the *Place d'Armes*, is ornamented with a statue of Pichegru, in white marble. At the N. extremity of the town is the salt spring from which it derived its ancient name of *Ledo Salinaris*: this spring continues to yield great quantities of table salt; four pumps are kept constantly at work, and the evaporating houses (*bâtimens de graduation*) are very extensive. Lons has a theatre, a public library with 3,000 vols., a gallery of paintings and antiquities, tribunals of primary jurisdiction and commerce, and a communal college. It is the entrepôt of the agricultural produce, iron goods, timber, and wines of the dép., and has a fair on the 15th of every month.

LOO-CHOO, or LIEOU-KIEOU ISLANDS, a group tributary to the Chinese, in the N. Pacific Ocean, nearly midway between Japan and Formosa, and comprised within lat. 26° and 28° N., and long. 127° and 129° E. There are in all about 36 islands; but, excepting the Great Loo-Choo Island, towards the centre of the group, 70 m. in length, by from 12 to 15 m. broad, they are mostly of very inferior dimensions. The islands have a delightful climate, and a soil of great richness, producing the fruits and vegetables of countries the most remote from each other. Rice is cultivated with great care. Cattle, goats, and pigs are diminutive, but poultry are large and excellent. The islands yield sulphur and salt, and have rich mines of copper and tin. The natives appear to be of the same race as the Japanese; and have not merely adopted the costume, but speak the language of that people. Their religion is a species of Buddhism, and their government, like that of other Asiatic countries, of a despotical character. The Loo-Choo Islands were for some time subject to Japan, but were conquered by China about 1372. Kintching, the cap., is about 5 m. from its port Napkiang, near the SW. extremity of Great Loo-Choo; lat. about 26° 14′ N., long. 127° 52′ E.

LOOE (EAST and WEST), two contiguous anc. bors. and market-towns of England, co. Cornwall, hund. West, on both banks and close to the mouth of the Looe, 12 m. SE. Bodmin, and 210 m. W. by S. London. Pop. of Looe East 1,154, and of Looe West, 770 in 1861. Both towns are mean places, connected by a narrow, old bridge of 13 arches. In past times, each of them enjoyed the privilege of sending 2 mems. to the H. of C. from the reigns of Edward VI. and Elizabeth down to the passing of the Reform Act, when they were disfranchised.

LORCA (an. *Cliocroca*), a considerable town of Spain, prov. Murcia, cap. of a partido of its own name, on the Guadalentin, a tributary of the Segura, 42 m. WSW. Murcia, and 116 m. ENE. Granada. Pop. 19,297 in 1861. The vale of Lorca is remarkable for picturesque beauty and great fertility; and the town, close under the Sierra del Cano that bounds it on the left, and the fine old castle on a rock hanging over it, adds greatly to the beauty of the picture. This has evidently been a considerable place; but the lower part of the town being concealed by trees, nothing is seen on approaching it but a number of low houses crowded on the side of the mountain, and from the similarity of colour seeming almost to belong to it. This is the old or Moorish town, and is very irregular and mean in appearance; but the new town, on the plain, is much more regularly laid out, and better built. A collegiate (once episcopal) and seven parish churches, two hospitals, an episcopal palace, and a royal college, are the chief buildings and establishments. Saltpetre is manufactured on a large scale, and soap, thread, and linens are produced in small quantities; but the chief resources of the town consist in its great September fair, its markets, and the produce of its neighbourhood, both in flocks and agricultural produce.

Lorca, supposed to be the *Cliocroca* mentioned in Antonine's Itinerary, was exposed to frequent attacks during the contests between the Moors and the crown of Castile, and has at various times sustained sieges. It was nearly destroyed at the commencement of this century. In 1792, a spe-

Digitized by Google

culator, with the permission of government, collected at a great expense all the waters of the district into a common reservoir (*pantano*) resembling that of Alicante. The basin was said to be capable of containing water sufficient to irrigate for years the entire vale of Lorca. Ten years afterwards (30th April, 1802) the waters, which had for some time been undermining the reservoir, rushed out with an impetuosity that swept everything before it, men and cattle, public buildings, and even trees and rocks. About 600 houses, a church, 2 convents, 2 hospitals, several mills and fountains, were at once swallowed up and disappeared, about 6,000 human beings and 24,000 cattle being at the same time destroyed. The agricultural districts were covered over with sand and rubbish, and the total loss occasioned by the catastrophe is supposed to have exceeded a million sterling.

LORETTO, a town of Central Italy, prov. Ancona, on a bold and commanding eminence, 3 m. from the Adriatic, and 12 m. SE. Ancona, on the railway from Ancona to Naples. Pop. 8,701 in 1862. The town is surrounded with walls, constructed in 1587. Loretto is indebted for its existence to its having the good fortune to possess the *Santissima Casa*, or house occupied by the Virgin Mary, in Nazareth, conveyed by angels, first to Tersato in Dalmatia, and thence, by the same agency, in 1294, to its present site. The *Santissima Casa* is a mean-looking hovel, about 30 ft. in length, by 13 or 14 ft. in width, and 18 ft. in height; apparently built of Apennine limestone, with a modern vault of timber-work. It is incased in a shell of marble, sculptured with bas reliefs, representing the history of the Virgin; the whole being under the dome of a splendid church, built to protect the sacred edifice. In a niche within the latter, once fenced in with gratings of solid gold, but now with pieces of gilt wood, is the image of the Virgin, affirmed to be the work of St. Luke, to whose talents as an artist it does little credit, being, according to Mr. Moore (Italy, i. 291), 'a little old woman about 4 ft. in height, with the features and complexion of a negro.' Her dress is tawdry, and in the worst possible taste: she literally glitters in jewels and brocade, and reigns 'amid the continual glare and smoke of lamps and candles, held by figures of angels.' The church, which encloses the *santissima casa* is said to have been designed by Bramante. According to Eustace (Classical Tour, i. 200), it is a 'very noble structure;' but it is less favourably spoken of by other travellers. Its gates, which are of bronze, are embellished with *basso relievos* of the most admirable workmanship; in the area before it is a handsome marble fountain, and a large statue of Pope Pius VI. The riches formerly accumulated within this sanctuary were a subject of astonishment to all travellers. The popes are believed to have occasionally abstracted some of the gold offerings, and to have substituted false for real gems. But, when the French acquired possession of Loretto, they acted with less reserve; and, undismayed by the sanctity of the place, rifled its repositories, and carried off every article of value, applying them to secular purposes.

A lucrative trade was formerly carried on at Loretto in rosaries, crucifixes, *agnus Dei*, and such like articles, partly taken off by pilgrims to the shrine, and partly exported. But this trade has now much fallen off. The number of pilgrims, though still very considerable, has also greatly declined; and they are now mostly of the lowest and poorest classes. On their arrival in town, they were formerly received into a hospital, where they were boarded and lodged for three days; and this privilege had probably as much to do as superstition in attracting them to Loretto.

L'ORIENT, a strongly fortified sea-port town of France, dép. Morbihan, cap. arrond., at the confluence of the Scorff with the Blavet, at the head of the bay of Port Louis, about 3 m. from the Atlantic, and 29 m. W. by N. Vannes, on the railway from Vannes to Brest. Pop. 34,536 in 1861. The population doubled in the twenty years 1841–61. About 6,000 of the inhabitants are employed in the dockyard and its appendages. L'Orient is clean and regularly built; the streets are wide, straight, and well paved; and the houses well constructed and handsome. One of its public squares, the *Place Royale*, is planted with lime-trees, and it has other good promenades. The principal church is very large and has a lofty spire, which is a conspicuous landmark. The prefecture, auction-hall, town-hall, and theatre are handsome edifices. The public slaughter-houses (*abattoir*) are remarkably clean; and the meat, fish, and bread markets are, next to those of Rennes, the best constructed and most extensive in Brittany. In the centre of the market-place is a granite column erected to the memory of Commander Bisson.

L'Orient, like Brest, is a natural dockyard: as a port of war it ranks third, and as a construction port it is the first in France. The port is secure, commodious, and of easy entrance. It is bordered by fine quays, on which are extensive buildings and establishments connected with the government dockyard; an observatory 120 ft. in height, which serves also for a telegraph and a light-house, and a very handsome public fountain. The naval establishment is on a smaller scale at L'Orient than at Brest; it has no *bagne*, but it has a place of confinement for soldiers guilty of insubordination. More ships of war are now built in the dockyard of L'Orient than at any other in France, and the greater number of the ironclads of the Imperial marine were constructed here. L'Orient has slips enough for the construction of 30 vessels of all sizes; frigates and gunboats are, however, the classes of ships chiefly built. A new dockyard, of twice the size of the old port, and with a mile of first-class building slips on the Blavet, opposite the town, was in course of construction in 1865. L'Orient has excellent sheers for masting vessels, and good block sheds, the machinery in which, as well as a portion of that for cable-making, is wrought by steam. There are also numerous establishments for the construction of steam-engines for ships of war. The buildings formerly belonging to the French E. I. Company are now converted into barracks. The arsenal and naval stores are very extensive, and the artillery barracks are capable of accommodating 2,500 men. The lazaret is on a small island to the S., between L'Orient and Port Louis. L'Orient has a school of naval artillery and a spacious artillery ground near the town, a school of hydrography, established 1771, a large and well-arranged commercial college, a preparatory school for training for the government schools, a communal college, gratuitous schools of drawing, geometry, and arithmetic, a public and a good naval library, museums of chemistry and mineralogy, an agricultural society, and various educational societies. It is the seat of tribunals of primary jurisdiction and commerce, and a chamber of commerce.

The manufactures of L'Orient, chiefly consisting of hats, linens, gold lace, and earthenware, are not very important. Its trade, however, has latterly begun to increase. The chief exports are wax, honey, butter, corn, cattle, and pilchards, the latter being taken in great quantities on the

Digitized by Google

adjacent coast, are sent to Nantes to be prepared for exportation.

Though at present little eminent for trade, L'Orient owes its origin and former importance almost wholly to commerce. It was but an insignificant village when, in 1728, the French E. I. Company made it their principal naval *dépôt*; and such was the influence of the change, that in 1738 its pop. is said to have amounted to 14,000. On the dissolution of the company in 1770, L'Orient was made one of the stations for the French navy, and a free commercial port.

LORRAINE (Germ. *Lothringen*), one of the largest of the an. provs. of France, in the NE. part of the kingdom, now distributed among the déps. of Meurthe, Meuse, Moselle, Vosges, and Bas-Rhin.

LOSTWITHIEL, or LESTWITHIEL, an an. bor., market town, and par. of England, co. Cornwall, hund. Powder, on the W. bank of the Fowey, 5 m. SSE. Bodmin, and 211 m. W. by S. London on the railway from Plymouth to Falmouth. Pop. of par. 1,017 in 1861. The houses are chiefly of stone, roofed with slate; but the streets narrow and ill-paved. The church, a curious old building, has a large E. window, and a fine tower and spire at the opposite end: the living is a vicarage, in the gift of Earl Mount-Edgecombe. It has also places of worship for Independents, Wesleyan and Primitive Methodists, with attached Sunday schools. The corporation support a grammar and writing school; another school, for poor children, is slenderly endowed by the trustees of the late Rev. St. John Eliot; and there are a few money bequests. Near the church, an ancient building, supposed to have been either a palace of the duke of Cornwall, or a court-house for the stannaries, was, till recently, used as a prison during the winter and summer co. sessions, now removed to Bodmin. There is a town-hall, where petty sessions are held, and under it is a small gaol. Tanning and wool stapling are the principal trades, and the town derives some importance from its situation on the Fowey, by which iron and copper ore are exported. Lostwithiel was made a free bor. by Richard, earl of Cornwall, and incorporated by James I. It sent two mems. to the H. of C. from the 19th Edward II. down to the Reform Act, by which it was disfranchised. It is not included in the Municipal Reform Act; but is now, as formerly, governed by a mayor, six capital and seventeen inferior burgesses. Markets on Friday; cattle fairs, July 10, Sept. 6, and Nov. 13.

About 1 mi. N. of Lostwithiel, on the summit of a hill, is Restormel Castle, the ancient seat of the baronial family of Cardinan, and subsequently of the earls of Cornwall. It was ruinous even so early as the time of Henry VIII., but was repaired and occupied during the civil war.

LOT, a dép. of France, reg. S., chiefly between lat. 44° 15′ N., and long. 1° 2° E., having N. Corrèze, E. and SE. Cantal and Aveyron, S. Tarn-et-Garonne, and W. Lot-et-Garonne and Dordogne. Area, 521,174 hectares; pop. 295,542 in 1861. The dép. is mountainous, with a general slope towards the SW. Its mountains are ramifications of those of Cantal, and rise in the E. about 2,500 ft. above the sea. Its chief rivers are the Lot and the Dordogne; from the first of which it derives its name. The Lot, which rises in Lozère, about lat. 44° 30′ N., long. 3° 45′ E., runs with a very tortuous course, generally W., through Aveyron, the S. part of Lot, and the centre of Lot-et-Garonne and Gironde; uniting with the Garonne at Aiguillon, about lat. 44° 18′ and long. 0° 19′ E. It is navigable, during four months of the year, for nearly 190 m.: Mende, Cahors, and Villeneuve d'Agen are on its banks. There are an immense number of narrow valleys, watered by small rivulets; these have frequently an alluvial soil of great fertility, but the soil in most parts is either calcareous, or stony and gravelly. There are about 252,533 hectares arable, 25,825 in pasture, 58,627 in vineyards, 87,255 in woods, and 71,284 occupied by heaths and wastes. Lot produces more corn than is required for its own consumption, but chestnut-flour forms an important article of food among the rural pop. The corn grown is principally wheat, maize, and rye; and the total annual produce of all kinds is estimated at between 1,500,000 and 1,600,000 hectol. Agriculture is extremely backward, and there is a great want of capital, a consequence mainly of the splitting up of the land into an immense number of small properties. The plough employed was, till within the last few years, a facsimile of that described by Virgil, and drawn by oxen: the spade or hoe is, however, chiefly used in the culture of thin soils. The produce of wine amounts to about 600,000 hectol. a year, a third part of which is consumed by the inhab., and the rest sold or converted into brandy. The wines known in the market as *vins de Cahors* are strong and very dark coloured, and are principally employed to give body and colour to other wines, for which purpose they are principally sent to Bordeaux. Tobacco is grown to some extent, and about 1,850 hectares are appropriated to its culture. The climate is favourable for the mulberry, but the silkworm does not thrive. A few proprietors have flocks of Merino sheep, but the pastures are badly irrigated and attended to, and most kinds of live stock are indifferent. The goats' hair of the dép. is, however, highly esteemed. The produce of sheep's wool is estimated at 500,000 kilog. a year. A great many hogs are fattened for sale in the neighbouring déps.; and about 60,000 turkeys and geese are annually exported, preserved in their fat. A considerable proportion of the truffles used in *Pâtés de Périgord* come from this dép. There are some iron and coal mines, but both mining and manufacturing industry are little attended to. A few copper and iron forges, woollen, cotton, and linen cloth factories, paper mills, and tanneries are the chief manufacturing establishments; but the inhabitants are usually supplied with cloths and leather in exchange for their wool and skins from the adjacent industrial déps. There are nearly 1,000 flour mills in the dép. Lot is divided into three arronds; chief towns, Cahors, the cap., Gourdon, and Figeac.

LOT-ET-GARONNE, a dép. of France, reg. SW., formerly included in Guienne; chiefly between lat. 44° and 44° 40′ N., and long. 0° and 1° E., having N. Dordogne, W. and SW. Gironde and Landes, S. Gers, and E. Tarn-et-Garonne and Lot. Length and breadth about 50 m. each; area 535,396 hectares. Pop. 332,065 in 1861. The surface is mostly level, with a slope to the W. The Garonne intersects the dép. from SE. to NW., and receives about its centre the Lot from the E. The banks of these rivers may be classed among the most productive portions of France; but 265,496 hectares consist of a chalky soil, and about one-eighth part of the surface in the W. of the dép. is composed of *landes*, or sandy plains, sprinkled with marshes, analogous to those of the adjoining déps. of Gironde and Landes. The dép. is principally agricultural. The corn grown exceeds what is required for home consumption: it is chiefly wheat and maize on the richer lands, and rye on the poorer. The produce of wine is estimated at about 650,000 hectolitres a year, of which nearly a half is exported. The N. part of the dép. produces

Digitized by Google

about 40,000 hectols. a year of chestnuts, from 7,000 to 8,000 hect. of which are sent to Bordeaux and the neighbouring dépts.: 2,030 hectares are occupied with tobacco, which produced in 1833 746,526 kilogs., valued at about 560,000 fr. Excellent hemp is grown. The prunes of Agen are highly esteemed, and are exported to the value of 600,000 fr. a year: the dried figs of Clairac are also celebrated. On the *landes* are many fir plantations, which furnish about 800,000 kilogs. of resin, and 300,000 kilogs. turpentine a year, besides pitch and deals. The cork tree grows in a few communes, and its produce is valuable. Artificial pasture lands are rare. Large flocks of geese are reared, especially near Agen; they are fattened on maize, and preserved in their fat. Landed property is greatly subdivided, and of 122,558 properties subject to the *contribution foncière*, 51,246 are assessed under 5 fr., and 19,780 at from 5 to 10 fr. Mining industry is insignificant; but some iron ore is smelted by means of charcoal, there being no coal mine in the dép. There are numerous distilleries. At Nerac, Mezin, and Barbaste are cork factories, which together employ about 700 hands; and at Agen is a sail-cloth factory, with 300 looms, for the service of the French navy; with extensive rope-walks. Lot-et-Garonne has also manufactures of woollen thread, serge, linen and cotton cloths, gloves, paper, starch, glass, and earthenware, besides tanneries and iron works. The dép. is divided into four arrond.; chief towns, Agen, the cap., Marmande, Nerac, and Villeneuve d'Agen.

LOTHIAN, an extensive, fertile, well cultivated, and rich district of Scotland, lying along the S. shore of the Frith of Forth. It is divided into the cos. of East Lothian, or Haddington; Mid Lothian, or Edinburgh; and West Lothian, or Linlithgow.

1st. *East Lothian*, which, as its name implies, is the most easterly division of the Lothians, has the Frith of Forth on the N., the German Ocean on the E., Berwickshire, on the S., and Mid Lothian on the W. It is of an elliptical shape, and has an area of 291 sq. m., or 185,937 acres, of which about four-fifths are capable of cultivation. The S. portion of the co. is occupied by the Lammermuir Hills, which divide the co. from Berwick; but with this exception it is mostly level, or merely undulating; and when viewed from the adjacent heights, appears like an extensive, rich, and beautiful plain, gradually sloping to the sea. The district along its E. coast, comprising about 20,000 acres, has a reddish, loamy, and very fertile soil. The soil gradually becomes more clayey as it recedes from the sea; and, except in the district now referred to, its general character is that of a clay bottom. The climate is comparatively dry and early; but the E. winds, in April and May, are often very severe. This is one of the best cultivated districts of the empire, and is remarkable for the intelligence and skill of its farmers, and their superior husbandry. The best farming is seen in the district along the E. coast, the soil being there adapted alike to the growth of turnips and of wheat. The turnip culture, indeed, is carried on here to a greater extent, on more correct principles, and with better success than in any other part of the empire. In the clayey lands, or those that have a wet retentive subsoil, summer fallow is extensively practised, and is found to be the best foundation of a profitable system of cultivation. The fatting of cattle of all kinds for the butcher is an important part of the economy of every well conducted farm; and a great extent of land is kept in grass for a long period. Exclusive of the Lammermuir district, which is principally devoted to the breeding of sheep, the farms in the other parts of the co. extend from 60 acres up to 500 acres, or more, the average being about 250 acres. Every farm has a thrashing machine, and most of these are driven by steam. Rents are commonly fixed in corn, convertible into money at the *fiar* prices of the co. Eight bushels of wheat may be taken as the average rent of the wheat lands of the district, which, taking the wheat at 6s. a bushel, will be equivalent to a money rent of 48s. an acre.

Notwithstanding its present highly advanced and improved condition, agriculture was in an extremely backward and depressed state in this co. even so late as 1770. The land was then not half tilled; a rotation of crops was comparatively unknown; the stock and implements of husbandry were alike defective; much of the land was injured by the want of drainage; the hinds, or farm labourers, were badly fed and badly clothed; and the ague regularly made its appearance in spring in every hamlet and village, and almost, indeed, in every house. The change in the interval has been most striking and beneficial. Even within the last thirty years many important improvements have been made, principally by the introduction of furrow draining and bone manure, a better rotation of crops, and a more efficient and skilful management. The farm houses and offices are excellent; but while everything else has been vastly improved, the cottages have not, in the majority of cases, been sensibly ameliorated, and their condition is discreditable alike to the farmers and the landlords. Except, however, as respects their lodging, the labourers are well off; and the hinds, or farm labourers, now receive each 24 bushels of oats a year more than they did previously to the commencement of the improvements. Estates of various sizes; some very valuable. There are about 7,500 acres of wood. The W. division of the co. has valuable beds of coal, and limestone is very generally diffused. Except some considerable distilleries, manufactures are all but unknown. The Tyne, which flows through the centre of the co., is the only considerable stream. The co. sends one mem. to the H. of C.; and the bors. of Haddington, N. Berwick, and Dunbar join with Lauder and Jedburgh in returning one mem. Registered electors for the co., 673 in 1865. At the census of 1861, the co. had 6,802 inhab. houses, and 37,634 inhab., while in 1841 E. Lothian had 8,010 inhab. houses, and 35,886 inhab. The old valued rent was 14,072*l.*; the new valuation for 1864–65 was 254,252*l.* exclusive of railways.

2. *Mid Lothian*, or Edinburghshire, has the Frith of Forth on the N., E. Lothian on the E. Roxburgh, Selkirk, Peebles, and Lanark on the S., and W. Lothian on the W. Area, 397 sq. m., or 254,300 acres, of which about two-thirds are supposed to be arable. In some parts, especially along its S. border, it is rugged, and even mountainous; the ridge of the Pentland Hills, which approaches within a short distance of Edinburgh, divides its low grounds into two portions, that unite towards the sea. Soil for the most part clayey, and not in general very fertile. Agriculture similar to that of E. Lothian, but inferior, its details being also a good deal modified by the demand of the capital for milk, butter, and potatoes. Improvements of all sorts have been prosecuted with great zeal and industry. In 1727, a small field of wheat, within a short distance from Edinburgh, was reckoned so extraordinary a phenomenon that persons came from a great distance to see it. (Robertson's Recollections, p. 267.) But at present wheat is the principal object of the

Digitized by Google

farmer's attention, and there may be from 20,000 to 22,000 acres under that crop. There are a considerable number of rather large estates; but property is, on the whole, pretty well divided. There are large beds of coal in this co. For details as to its trade, manufactures, literary establishments, and other particulars, the reader is referred to the articles Edinburgh and Leith. The co. has, exclusive of Edinburgh, 27 parishes: it returns 4 mems. to the H. of C., viz. 1 for the co., 2 for the city of Edinburgh, and 1 for Leith and Musselburgh. Registered electors for the co., 1,656 in 1865. At the census of 1861, the co. had 24,162 inhab. houses, and 273,997 inhabitants; while in 1841 Mid Lothian had 38,927 inhab. houses, and 225,454 inhab. The old valued rent was 15,921*l.*, while the new valuation for 1864–65 was 403,420*l.*, exclusive of railways.

3. *West Lothian*, or Linlithgowshire, the smallest of the divisions of Lothian, has the Frith of Forth on the N., Mid Lothian on the E. and S., and Lanark and Stirling on the W. It is of a triangular shape, and has an area of 101 sq. m., or 64,375 acres, of which about three-fourths are arable. Surface varied with knolls: there are, however, but few hills, and no mountains. In the S. part of the co. the ground is moorish, and there are some morasses; but elsewhere it is comparatively fertile. Agriculture similar to that of Mid Lothian, with this difference, that more turnips are raised, and fewer potatoes. Estates large; farms of a middle size. Coal is found in most parts of the co. Manufactures of no importance. W. Lothian is divided into 13 parishes: it sends 1 mem. to the H. of C. for the co., and the bors. of Linlithgow and Queensferry join with others in returning representatives. Reg. electors for the co., 813 in 1865. At the census of 1861, the co. had 5,392 inhab. houses, and 38,645 inhabitants; while in 1841 W. Lothian had 5,333 inhab. houses, and 26,872 inhab. The old valued rent was 6,237*l.*; the new valuation for 1864–65 was 163,464*l.*, exclusive of railways.

LOUDUN, a town of France, dép. Vienne, cap. arrond., on a hill, 31 m. NNW. Poitiers. Pop. 4,504 in 1861. The town was formerly of considerable importance, and has still many large houses and wide streets; but its inhab. being principally Protestants, it suffered much from the revocation of the edict of Nantes, from the effect of which it has never recovered. It has a hospital, a theatre, the remains of an ancient castle, a tribunal of original jurisdiction, and manufactures of woollen cloth and lace.

This town is famous in the history of fanaticism for a judicial murder committed in it, in 1634, when a curate, of the name of Grandier, accused and convicted of sorcery and magic, was burnt alive. The unfortunate curate appears to have had but little respect for that rule of the R. Cath. religion which enjoins the celibacy of the clergy; and he is said to have practised his arts with most success on the nuns belonging to an Ursuline convent in the town.

LOUGHBOROUGH, a market town and par. of England, co. Leicester, hund. W. Goscote, near the left bank of the Soar, 10 m. N. Leicester, 98 m. N. by W. London, and 110 m. by Midland railway. Pop. 10,830 in 1861. It is a clean and respectable-looking town, with several streets lined with modern brick houses, meeting the principal avenue on the old London road. The market-place, in which is the town-hall, was formerly narrow and confined, but has been more recently laid open by the pulling down of the old market-house. The church, a large and handsome structure in the perpendicular style, has a lofty and well-proportioned tower: the living is a rectory in the gift of Emanuel College, Cambridge. There are places of worship for Presbyterians, Independents, Baptists, Unitarians, Wesleyan and Primitive Methodists, and the Society of Friends, connected with which are 7 Sunday schools, furnishing religious instruction to between 2,000 and 3,000 children of both sexes. Besides a well-endowed grammar-school, Loughborough has a charity-school for clothing and instructing 80 boys, a subscription-school, and a school of industry. A dispensary and several charitable societies confer essential benefits on the poor, and there is also a large public library and news-room. Fleecy-hosiery and bobbin-net lace are the chief branches of industry, the former occupying nearly 1,000 hands in the town and neighbourhood; many persons are employed in making cotton hose and gloves; there are many makers of machinery, and a considerable number of shoemakers, working for the London market. The prosperity of the town has been increased by the facility of transit afforded by the Leicester Navigation and Loughborough Canal; and it has derived still greater benefit from the opening of the Midland Counties' railway, which brings it within 4 hours' distance of the metropolis. Petty sessions every market-day. Loughborough is the election town and principal polling place for the N. division of the co. Markets on Thursday: large fairs for horses, cattle, and sheep, Feb. 14, March 28, April 25, Holy Thursday, Aug. 12, and Nov. 13: cheese fairs, Mar. 24 and Sept. 30.

LOUGHREA, an inland town of Ireland, co. Galway, prov. Connaught, on Loughrea Lake, 21 m. E. by S. Galway. Pop. 3,063 in 1861, against 5,458 in 1841. The town, which was formerly fortified, consists of several irregular streets and lanes. The public buildings are—the par. church, the spire of which was thrown down by lightning in 1832; 3 R. Cath. chapels, several large schools, and a barrack. General sessions are held twice a year; petty sessions on Thursdays. It is a constabulary and revenue guard station. Markets on Thursday: fairs on Feb. 11, May 26, Aug. 20, and Dec. 5.

LOUIS (ST.), a city of the U. States of N. America, being, though not the cap., the principal place in the state of Missouri, and the cap. of the judicial district and co. of its own name; admirably situated on the Mississippi, 18 m. below the mouth of the Missouri, and nearly 200 m. above the mouth of the Ohio, on the terminus of the Ohio and Mississippi railway. Pop. 160,773 in 1860, against 77,860 in 1850, and 5,852 in 1830. The town extends along the margin of the river, from which the ground rises by a gentle ascent to a second plateau, about 40 ft. above the level of the first. Fortifications were erected on this terrace at an early period in the history of St. Louis; but these have been removed to make way for buildings, and their site is now occupied by streets and houses. In the older part of the town, by the brink of the river, which is the chief seat of trade, the streets are narrow and inconvenient; but of late they have been much improved. The more modern sections, on the high grounds, are laid out in broad avenues and streets, in which are most of the residences of the merchants and professional men. The old town of St. Louis was chiefly built of wood; but a large portion of these having been burnt down in a great fire in 1849, they are now constructed of a kind of limestone found on the spot, which is soft when first quarried, but becomes very hard and durable after exposure to the air. Many of the warehouses in the lower town have 3 or 4 stories,

Digitized by Google

and there are some large castellated private mansions.

St. Louis has a handsome Rom. Cath. cathedral, 136 ft. in length, 84 ft. in breadth, with a tower 90 ft. high, surmounted by a spire. This edifice is of the Doric order, and is roofed with copper. It has several bells, cast in Normandy, one of which weighs 2,600 lbs. There are churches belonging to the Baptists, Episcopalians, Presbyterians, Methodists, Unitarians, and other sects, most of them large and commodious buildings. St. Louis Rom. Cath. university, founded and conducted by Jesuits, has about 200 students. It is intended chiefly for the study of the classics and *belles-lettres*, but has also a medical department. Its library comprises 12,000 vols. St. Louis has a convent, a hospital, an orphan asylum, a female charitable association, and many primary and grammar schools. Among the most ornamental public buildings are the court-house and market-house, with the town-hall above it. It has also several theatres. Nearly all the houses are supplied separately with water from a large reservoir.

Vessels of the largest class come close up to the quays, and St. Louis has become the grand emporium of the countries on the Missouri and the Upper Mississippi. The value of the produce received at her quays in 1864 was estimated at above 30 millions dollars. There belonged to St. Louis, at the end of 1863, above 60,000 tons of shipping, mostly steamers. The city, besides being one of the headquarters of the Mississippi steam navigation, is also the principal seat of the American fur trade, and of the overland trade with Mexico. The inhab. are now chiefly Americans; but, till lately, they were principally descendants of the French, by whom the city was founded in 1764.

Louis (St.), a town of Western Africa, and the cap. of the French possessions in Senegambia, on an island of its own name in the Senegal, about 7 m. from its mouth; lat. 16° 21′ N., long. 16° 13′ 45″ W. Pop. 18,530 in 1861. The town is laid out on a regular plan, nearly a mile in length, by about 200 yards broad. Fort St. Louis, with its esplanade, occupies the centre of the town; and from two of its opposite faces, a street is prolonged, and crossed at right angles by several others. The town has about 250 brick houses, half of which have only a ground floor, and the other half rarely more than an additional story: the rest of the dwellings are mere huts of mud and straw. The chief public buildings are the governor's residence, the barracks, and the new hospital. The last is a superior edifice of its kind for a colony of such inferior rank, and has 122 beds, a number sufficient to accommodate the greatest average number of sick. There is good anchorage in the river on both sides the island, but especially in the E. channel, where ships may lie quite close to the quay. There are neither brooks nor public fountains in St. Louis; and the water for daily use, which has to be brought from the river, is brackish. St. Louis is the seat of a tribunal of primary jurisdiction and of commerce, and a council of appeal. It is also the residence of the apostolic prefect of the colony, and the chief officers of the colonial government. Boat-building and a little weaving are its principal branches of industry.

LOUISBOURG. See Cape Breton.

LOUISIANA, one of the U. States of N. America, in the S. portion of the Union, between lat. 29° and 33° N., and long. 88° 40′ and 94° 25′ W., having N. Arkansas and Mississippi, E. the latter state, W. Texas, and S. and SE. the Gulf of Mexico: length N. to S. 240 m., breadth varying from 100 to 210 m.; area, 46,341 square miles. Pop. 791,305 in 1861, against 352,411 in 1840. The surface, which is generally level, and slopes gradually towards the S., is traversed in its N. part by a few hill-ranges of inconsiderable height. Its shores, especially those of the delta of the Mississippi, are so very low that they are apt to be inundated by high spring tides. The delta, which comprises an alluvial flat of about 12,000 sq. m., is no where, indeed, raised much more than 10 ft. above the level of the gulf. Beyond the salt marshes and cypress swamps of the coast the land is heavily timbered; but most part of the interior, and the W. portions of the country, consist of immense prairies, generally without timber. In the NW. and to the E. of the Mississippi, the surface is much broken, and covered with extensive pine forests. Besides the Mississippi, which forms the E. boundary of Louisiana for 150 m., and traverses it for 220 m. more, the chief rivers are the Red River, Washita, and Teche, tributaries of the former; the Atchafalaya and Sabine rivers fall separately into the Gulf of Mexico; and Pearl River, flowing to the Atlantic, forms part of the E. boundary of the state. Lakes of considerable size are numerous in the low country: that of Pontchartrain is 40 m. in length by 24 in breadth. Lakes Borgne, Pontchartrain, and Maurepas compose a continuous water communication, though navigable only for small vessels, being shallow, except in the centre. The coast has numerous bays and inlets, but, owing to their insufficient depth, it has no good harbour. There is, however, a good roadstead on the W. side of the Chandeleur Islands, much used by the navy of the United States during the insurrection of the Southern States, in the years 1861–63. Besides Chandeleur, sundry islands are scattered along the coast, as Barataria, Thomas, St. Croix, and Ascension. These islands are more elevated than the mainland, being from 30 to 100 ft. above the level of the sea: they are covered with dense forests, abounding with deer and game.

The soil of Louisiana is of every quality, from the most productive to the most sterile. Some portions of the great alluvial plain, and of lands on the banks of the rivers, are as fertile as any in the Union; but the prairies consist for the most part of second-rate lands. The red colour of the soil on Red River, and some of the other streams, is owing to an admixture of oxide of iron, which, with salt, is very largely dispersed through it. Iron is found in the W., and coal in the N.; but, except these, the mineral products are insignificant.

Both heat and cold are experienced in a greater degree than in the other states in the same lat. The orange and sugar cane, which are cultivated on the Atlantic coast as high as 33° 30′ N., are not met with here much above the 31st deg. In the S. the winter is usually characterised by a short period of NW. winds and white frosts at night; but in the N. and central parts sharp frosts and sometimes falls of snow occur. In summer the climate of the N. is mild and comparatively healthy; while in the S. intense heats last for a long time, thunder-storms and hurricanes are frequent, and the yellow fever and other pestilential diseases are prevalent.

Cotton and sugar are the great staples of Louisiana: rice, maize, and tobacco come next in order; but the raising of these has been neglected for that of cotton, and the culture of indigo is now almost abandoned. The crop of cotton, which is of various kinds, was estimated, previous to the breaking out of the civil war in the United States,

Digitized by Google

at half a million bales a year. It is raised principally in the NE. part of the state. Sugar is the principal product as far N. as the 31st deg. of N. lat., except on the lands immediately adjacent to the Mississippi, which, being easily irrigated, are appropriated to rice. The cane, however, though more precarious, is raised still further N., and its culture has latterly extended to the higher parts of the country. The crop, at an average, may be taken at about 160,000 hhds. Maize yields sometimes 70 bushels an acre, and barley and oats thrive well; but the climate is not suitable for wheat and rye. The vine arrives at perfection, and many kinds of wild fruits are met with, but the apple does not succeed, and the cherry is wholly unproductive. Neither the palmetto nor the long-leaved pine, which grow in the other Atlantic states, are met with. Pine-timber is, however, an important article of export, and the pine forests afford great quantities of pitch, tar, and turpentine. Some cotton is grown in different parts of the prairies, but these tracts are mostly appropriated to the feeding of large herds of cattle and horses. The sheep supply good mutton, but their wool is coarse. Vast herds of elks, deer, and buffaloes wander wild over the prairies on the banks of Sabine River. Louisiana is almost wholly an agricultural state, its manufactures being quite unimportant. The commerce of the state is centred in New Orleans (which see). To facilitate internal water communication, various canals have been cut between the Mississippi and the lakes of the low country. Railways also connect the principal towns.

Louisiana is subdivided into two great districts, —the E. and W.; the former comprising 22, and the latter 10 parishes, equal in point of extent to the counties in the other states. New Orleans is by far the most considerable town in the state, and is, indeed, one of the greatest emporiums, not of the Union merely, but of the New World. Baton Rouge, also on the Mississippi, is the seat of government. The latter is vested in a governor, a senate, and house of representatives. The senate consists of 32 members, chosen every four years, each of whom must be resident in the district, and possessed of landed property of the value of 1,000 dollars. The house of representatives consists of 98 members, chosen every two years, each of whom must be 21 years of age, and have landed property worth 500 dollars. The right of election is in every white male citizen, who has resided in the county for which he claims to vote for the year next preceding the election, and has paid a state tax in the last six months. The members of the house of representatives receive each four dollars a day during the session. The governor is chosen by the joint ballot of both houses, for four years, and is ineligible to office during a similar succeeding term. The resolutions of 2-3ds of the members, in both houses of the legislature, become law without the concurrence of the governor. The legal code of Louisiana is a modification of the old French and Spanish laws, interwoven with those in force in other parts of the Union. Justice is administered in a supreme court, circuit courts, and inferior tribunals, presided over by judges appointed by the governor, with consent of the senate, and who hold office during good behaviour. The judges of the supreme court have each 5,500, and those of the circuit courts 3,500 dollars a year. Education is not conducted on any uniform plan in this state; but it has a large extent of valuable reserved school lands, and three colleges, Louisiana College at Jackson, Franklin College at Opelousa, and Jefferson College, par. of St. James, each of which have a grant of 15,000 dollars a year. But the cause of education, as well as the general prosperity of the state, suffered much in the civil war, in which the citizens took an active part, on the side of the so-called Confederate States. The 'ordinance of secession' was voted by the Louisiana convention Jan. 25, 1861; but the city of New Orleans was taken by the United States troops on the 28th April, 1862, and the rest of the state occupied in 1863.

The region W. of the Mississippi was first explored by Europeans in 1512; but no effective settlement was made in it till about the end of the 17th century, when it was in part colonised by the French. The latter ceded it to Spain in 1763, but again recovered its possession in 1800. At that period, the whole territory, from the Gulf of Mexico to about the 50th deg. of N. lat., and from the Mississippi on the E. to the Rocky Mountains on the W., was comprised under the term Louisiana; and the whole of this immense territory, the possession of which was of such vast consequence to the United States, was purchased by them, in 1803, from France for 15,000,000 dollars. In 1804, the present state of Louisiana was constituted a territory under its existing limits; and, in 1812, it was admitted into the Union as an independent state. It sends 5 representatives to congress.

LOUISVILLE, a flourishing commercial city of the U. States, being the largest and most populous in Kentucky, cap. co. Jefferson; on the Ohio, above, but contiguous to, the rapids, 50 m. W. Frankfort, and 85 m. SW. Cincinnati. The pop., which in 1800 amounted to only 600, had in 1830 increased to 10,336, in 1840 to 21,210, and in 1860 to 69,740. The town, which is in a picturesque situation, is regularly laid out. Three broad and well paved streets, running parallel to the river, are intersected by others at right angles. The houses are compactly built of brick and stone, and, though generally of an ordinary description, many are in very good taste. The chief public buildings are the city-hall, gaol, some forty churches, a theatre, a free school, the U. States' branch bank, the union-hall, an asylum for disabled boatmen, and some workhouses. The free-school, built in 1829, has accommodation for 700 or 800 pupils. A medical school was instituted in 1837, and is in a flourishing state.

Louisville has manufactures of cotton yarn and stuffs, woollen goods, cotton bagging, iron, cordage, and hats, in which steam power is largely employed, and many type and brass foundries, tanneries, and flour mills. The falls of the Ohio are no serious obstruction to navigation, at least when the river is full, the whole descent being only 22 ft. in 2 m. To avoid them, however, the Louisville and Portland canal has been excavated in part through a solid ridge of limestone, to the depth of 12 ft. This canal is 2 m. in length, in some places 40 ft. deep, and of sufficient width to admit the largest class of steamers. There belonged to Louisville, in 1864, about 25,000 tons shipping, being all, or mostly all, steamers. The commercial transactions of the town are very large; and it has, with the exception of New Orleans and St. Louis, a more extensive trade than any town in the western part of the Union. Louisville was founded in 1780, and incorporated as a city in 1828.

LOUTH, a marit. co. of Ireland, on its E. coast, being the most northerly in the prov. of Leinster, having E. the Irish Sea; N. Carlingford Bay, which separates it from Down and Armagh; and W. and S. Monaghan and Meath. Area, 200,955 statute acres, of which 14,916 are unimproved

Digitized by Google

mountain and bog. Surface rugged in the N., but in other parts generally flat or undulating. Soil generally fertile. Estates of a medium size. Farms of all sizes, but the great majority small. Its crops and agriculture are similar to those of Meath (which see). Minerals unimportant. The linen manufacture is carried on to a considerable extent, especially at Drogheda, but the business has materially declined. Principal rivers Boyne and Dee. Principal towns Drogheda, Dundalk, and Ardee. Louth is divided into 4 baronies and 61 parishes; and sends 4 m. to the H. of C., viz. 2 for the co., and 1 each for Drogheda and Dundalk. Registered electors for co. 2,441 in 1865. At the census of 1861 the co. had 14,655 inhabited houses, and 75,973 inhabs.; while, in 1841, it had 22,856 inhab. houses, and 128,240 inhabs.

LOUTH, a mun. bor., market town, and par. of England, co. Lincoln, in the Wold div. of Louth-Eske hund., parts of Lindsey, 22 m. ENE. Lincoln, 127 m. N. London by road, and 141 m. by Great Northern railway. Pop. of bor., 10,560 in 1861. The town, agreeably situated in a fertile valley SE. of the wolds of N. Lincoln, has of late been much improved, and is well paved and lighted with gas. It has several handsome, and a few elegant buildings, the houses generally being of brick roofed with slate. The principal public buildings are the mansion-house, town-hall, sessions-house, and a theatre. The church is a large Gothic structure, with a beautiful E. window, and one of the finest towers in the country, above which rises a light octangular spire, to a height of 290 ft. from the ground. The living is a vicarage attached to a prebend in Lincoln cathedral. A second par. church, once existing, is now destroyed; but its site is marked by the cemetery still used as a place of interment. There are district churches and a Rom. Cath. chapel; and the Wesleyan and Primitive Methodists, Baptists, and Independents have each places of worship; to which, as well as the churches, well-attended Sunday schools are attached. The free grammar-school, founded in 1552 by Edw. VI., is endowed with landed property producing 700*l.* a year; the half going as salary to the master, the fourth to the usher, and the residue to the support of 12 poor women. A school, established in 1677, provides instruction in English and mathematics to 20 free boys and 30 pay scholars. There is also a national school; and among the charitable institutions are almshouses, a dispensary, benevolent society, and Bible society.

Louth contains little or no manufacture, there being few establishments of any importance. The river Ludd flows round a considerable portion of the town: it is not navigable, but feeds a canal beginning at the NE. extremity of Louth, and communicating with the Humber. The principal traffic outwards is that of corn for London, and the W. riding of Yorkshire; the inland freight being chiefly coal, most of which comes down the Humber from York. Louth was incorporated in the 5th of Edward VI., whose charter was confirmed by other subsequent monarchs, and, lastly, by Geo. IV. Under the Municipal Reform Act, the bor. is divided into two wards, and is governed by a mayor, and three other aldermen, with twelve councillors: it has a commission of the peace under a recorder. Louth is also one of the polling-places for the N. or Lindsey div. of the co., and the quarter-sessions for the co. are held here in Jan., July, and Oct., the April sessions being at Spilsby. Markets on Wed. and Sat.: considerable horse fairs, April 30, 3rd Monday after Easter, Aug. 5, and a large cattle fair, Nov. 23.

LOUVAIN (Dutch *Leuven*), a town of Belgium, and formerly one of the most populous and industrious in that country, prov. S. Brabant, cap. arrond. and cant., on the Dyle, a tributary of the Scheldt, and on the railway between Brussels and Liege, 14 m. ENE. the former. Pop. 32,026 in 1861. The town is partly surrounded by walls, and partly by an earth rampart from 80 to 100 ft. high, with a deep fosse outside, the total circuit of both being about 7 m.: a great part of the inclosed area consists, however, of fields and gardens. But its fortifications are now cut through by different roads, and are mostly converted into boulevards. The castle, now in ruins, on a hill near the Dyle, is of considerable, but uncertain, antiquity: it was long the residence of the counts of Louvain. The town which, though regularly laid out, is not generally well built, has several interesting public edifices. The town-hall, begun in 1440, and completed about ten years afterwards, one of the finest specimens of the florid Gothic in Europe, has been recently repaired, or rather restored, with great skill, at the joint expense of the town and government. It is lofty, has six light and elegant minarets, and is most elaborately ornamented. The collegiate church of St. Peter, a curious old edifice probably of the 14th century, with some good paintings, has a finely carved pulpit, and had, formerly, a steeple, blown down in 1604, which is said to have been of the extraordinary height of 533 ft., with two magnificent lateral towers. The university of Louvain was founded by John IV. duke of Brabant, in 1426; but it was not till 1631 that it obtained the privilege of teaching theology, for which it was afterwards so celebrated. It had, in the days of its prosperity, more than 40 colleges, some of which were established in halls that had previously belonged to the clothiers. This famous seminary, after being suppressed by the French in 1797, was re-established in 1817. It has at present 20 colleges, some of which are handsome buildings. Its library, originally the drapers' hall, is richly decorated with antique wooden carvings. Edward III. of England resided for a year, and the emperor Charles V. was brought up in the castle of Louvain. The town has seven churches, five nunneries, eight hospitals and charitable asylums, a royal college, and a college for ecclesiastics; and is the seat of tribunals of primary jurisdiction and commerce, a chamber of commerce and manufactures, and a board of forest inspection.

In the 14th century Louvain was one of the great seats of the woollen and linen manufacture, which supported, it is said, no fewer than 150,000 individuals within the city. But the manufacturers having revolted, in 1382, against the Duke of Brabant, many of them emigrated, on the revolt being suppressed, to foreign countries, and among others to England; where, being hospitably received by Edward III., they assisted in laying the foundations of the woollen manufacture. Louvain seems never to have recovered from this disaster. It has still some inconsiderable woollen fabrics; but it is now principally celebrated for its beer, said to be the best in Belgium. The different breweries produce about 200,000 barrels a year, a large proportion of which is sent to Antwerp and into Flanders. Louvain has also manufactures of lace and cotton yarn, and several dyeing and cotton-printing establishments, with tanneries, distilleries, and glass works, and numerous oil and flour mills. It is connected with the Demer near Mechlin by the canal of Louvain, navigable for vessels of 150 tons; and has a considerable trade in corn, clover seed, flax, and hemp, the produce of the surrounding country. Under the French it was included in the dép. of the Dyle.

Digitized by Google

LOUVIERS, a manufacturing town of France, dép. Eure, cap. arrond., on the Eure, and on the road from Rouen to Evereux, 12½ m. N. the latter, and 16 m. SSE. the former city. Pop. 10,841 in 1861. Louviers consists of an old and new town; the former is built chiefly of wood; the latter, which is the residence of the principal manufacturers, has a broad and elegant main street, and many well-built brick and stone houses. The Eure, which is navigable from the Seine as far as Louviers, is here crossed by several good bridges. A large church, supposed to have been constructed during the early crusades, a hall built by the Templars towards the end of the 12th century, a theatre, and a public library are the chief public buildings. Louviers was formerly a fortress of some strength, and portions of its wall still exist. It is now, however, distinguished wholly by its industry, and ranks as one of the first seats of the woollen manufacture of France. Fine broad cloths and woollen yarn are its chief products; but, of late years, other fine woollen goods have been introduced. Cotton yarn, linen thread, and soap are made; and there are many dyeing establishments, and bleaching grounds, tanneries, sugar refineries, and factories for looms and other machinery. The woollen manufacture employs about 7,000 hands, and the annual value of the goods produced is estimated at 12,500,000 francs, or about half a million sterling.

The peace between Philip Augustus and Richard I., in 1196, was concluded at Louviers. The town was taken and sacked by Edw. III. and Henry V.

LOWELL, a considerable and rapidly increasing town or city of Massachusetts, U. States, co. Middlesex, on the Merrimac, where it is joined by river Concord, considerably below Pawtucket Falls, 24 m. NW. Boston. The pop., which in 1830 was only 6,474, had risen to 36,830 in 1860. The rapid rise of Lowell is wholly owing to the great extension of its cotton manufactures. Though founded so late as 1813, it is now one of the most important manufacturing towns of the Union. Its situation is healthy and picturesque; it is well laid out, with wide streets, neat and often elegant houses, and numerous and well built public edifices. The Merrimac affords an ample supply of water-power to the cotton and other mills. A canal, 1½ m. in length, 60 ft. in width, and 8 ft. in depth, extends from the head of Pawtucket Falls to Concord River, whence water is conveyed by lateral canals to the different factories. This canal is the property of a company with a capital of 600,000 dollars, which owns a large establishment for the manufacture of machinery, and by which the mills at Lowell are usually built. Besides this extensive factory, there are a great number of other mills at Lowell, mostly built of brick, and from four to seven stories in height, besides machine shops and print works, and numerous joint-stock companies are engaged in the cotton manufacture. The goods principally manufactured are of a coarse description, consisting of sheetings, shirtings, drillings, printed cloths, calicoes, and negro cloth. Great quantities of cotton yarn also are spun. Including machinery for mills and railway engines and cars, the annual value of the goods made in the mills of Lowell is estimated at 25,000,000 dolls. Lowell has also manufactures of gunpowder, glass, flannels, cards, whips, harness, carriages, boots and shoes, brass, copper, and iron wares, planing and reed machines, and bleaching works. A railroad 26 m. in length connects Lowell with Boston. Lowell was incorporated as a town in 1824, and erected into a city in 1835. Under the amended constitution of Massachusetts of 1840, it sends 9 mems. to the H. of Rep.

The progress which the cotton manufacture has made and is making at Lowell, appears to have led many persons to suppose that it is destined to become, at no distant period, a formidable rival to Manchester and Glasgow. But there seems little cause for such a supposition. The manufactures of Lowell, and of America in general, will necessarily, for very many years, be confined to the coarser fabrics; and it appears unlikely that they should, under existing circumstances, be able to come into competition with the finer descriptions of British goods. The wages of labour are higher in the U. States than in Great Britain; and machinery is also more expensive, and the profits of stock higher. In fact, the only advantage on the side of the Americans is the greater cheapness of the raw material; and this, in the case of Lowell, and, indeed, of New England generally, amounts to so little as not to compensate by any means for the higher rate of wages.

LOWESTOFF, or LOWESTOFT, a market town, sea-port, and par. of England, E. coast, co. Suffolk, hund. Mutford and Lothingland, 22 m. SE. Norwich, 104 m. NNE. London by road, and 117 m. by Great Eastern railway. Pop. 10,663 in 1861. The town consists of one principal street, which has a gradual descent from N. to S.; and from this main avenue proceed several other streets towards the W.; but though well paved and lighted, they are narrow and irregular. In the market-place is a building open below, the upper part of which is used for assembly-rooms and other purposes; and there is a small theatre. The church is a handsome Gothic building, with a tower and steeple 182 ft. high, the living being a vicarage, in the gift of the Bishop of Norwich. There are also several district churches; and the Independents, Baptists, and Wesl. Methodists have places of worship, with attached Sunday schools. A free-school furnishes instruction for 40 boys, and there is a good national school. A friendly and benevolent society, a lying-in charity, and dispensary are the principal charities. Several handsome lodging-houses and hotels have been built for visitors coming here for bathing in the summer months; and there are warm baths, reading-rooms, and libraries. At the S. end of Lowestoff is a battery, with 13 pieces of cannon, and two others are placed at the N. end, near which latter, on a high point of land, stands a round tower, the upper lighthouse (first built in 1676, and rebuilt in 1778). On the beach, below the cliff, is another lighthouse; and by keeping both in a line, vessels are directed safely through the sand banks, which render this coast especially dangerous. The harbour, or rather road, is defended on the E. by the Corton Sand, the channel between the latter being marked by a light vessel, and well buoyed. Since 1827, an artificial harbour has been formed on a grand scale at Lowestoff, which communicates with the lake Lothing to the W. of the town; and then, by a short canal, with the Waveney, which is navigable to Beccles. Another canal joins the Waveney with the Yare, which has been rendered navigable for vessels drawing 10 ft. water as far as Norwich. Owing to the flatness of the ground, no locks, except the sea-lock at Lowestoff, are required on either line of navigation. This improved communication has been of great service to the country which it intersects, and especially to Beccles and the city of Norwich, on which, indeed, it has conferred most of the advantages of a sea-port.

The chief consequence of Lowestoff, as a port, is owing to its herring fisheries: the quantity of fish annually taken and cured is very large; while, at the same time, their quality is considered supe-

Digitized by Google

rior, and they fetch higher prices in the London market than those sent from Yarmouth. Sail-making, boat-building, and the manufacture of rope and twine, are extensively carried on; and many hands are employed in making barrels in which to pack the cured fish previous to their being sent to market or exported. Markets on Wednesday: fairs, May 12, Michaelmas Day, and Oct. 10.

Lowestoff derives historical celebrity from the fact, that, on 3d June, 1665, a sanguinary naval engagement was fought off the coast between the English and Dutch, the fleet of the former being commanded by the Duke of York, afterwards James II.; and that of the latter by Admiral Opdam, who was killed in the battle.

LOXA, or LOJA, a town of Spain, in Andalusia, prov. Granada, on the Xenil, 26 m. W. Granada, and 92 m. E. by S. Seville. Pop. 11,850 in 1857. The town stands on the S. side of a rocky gorge, by which the Xenil escapes from the fertile *Vega* of Granada; and its situation is peculiarly picturesque, being built on a steep acclivity, embosomed in groves of fruit trees, and overlooked by a toppling mountain, forming one of the offsets of the Sierra Nevada. It contains 3 parish churches, with 2 hospitals; and on an eminence, at its S. extremity, is a ruined Moorish castle, once of great strength and celebrity, but now the residence of a few hermits. Loja is proverbially noted for the fertility of its gardens, olive-grounds, and orchards, and the abundance and purity of its springs.

LOZERE, a dép. of France, reg. S., between lat. 44° and 45° N., and long. 3° and 4° E., having N. Haute-Loire and Cantal, W. the latter dép. and Aveyron, S. Gard and E. Gard and Ardèche. Length, NW. to SE., 65 m.; greatest breadth nearly 50 m. Area, 516,973 hectares; pop. 137,367 in 1861. This dép. lies chiefly on the NW. slope of the Cevennes, with the ramifications of which it is mostly covered. The surface varies from 2,500 to 5,000 ft. above the level of the sea; but its average elevation may be estimated at 3,800 ft. The dép. derives its name from the mountain Lozère in the SE., one of the principal summits of the Cevennes, 4,888 ft. in height. The rivers Lot, Tarn, Allier, and Gard have their sources within this dép., which is not, however, watered by any stream of magnitude. There are several small lakes, one of which appears to occupy the crater of an extinct volcano. The climate is cold; snow remains on the mountains during the greater part of the year, and fogs are frequent. The soil is mostly stony in the N. and S., and calcareous in the centre. The surface is distributed as follows, viz. arable land 208,660 hectares, meadows 35,166 h., forests 44,589 h., and heaths, wastes, &c., 179,000 h. Agriculture is very backward, and there is a great subdivision of property, and smallness of the farms. Rye and wheat are raised, but not in sufficient quantities to supply the consumption. In the Cevennes potatoes are extensively cultivated, and form, with chestnuts, the chief food of the inhabitants. About 50,000 hectolitres a year of inferior wine, and some oil and silk are produced: the sharp winds experienced in the dép. are, however, unfavourable to the silk-worm. Hemp and flax succeed well, but the culture of madder and saffron has been abandoned. The mountain pastures are excellent, and feed many sheep; coarse woollens and serges are made in almost every peasant's family. The dép. is rich in mineral products, but the mines are but little attended to. Lozère is divided into 3 arronds.; chief towns, Mende, the cap., Florac, and Marvejols.

LÜBECK, a city and republic of N. Germany: the city, which is the nominal cap. of the Hanseatic Towns, and the seat of their high court of appeal, is sit. on the Trave, about 10 m. (direct distance) from Travemunde, at its mouth in the Gulf of Lübeck, in the Baltic, 36 m. NE. Hamburg, and 38 m. SE. Kiel, with both which towns it is connected by railway. Pop. of city, 26,672; and of city and state, 49,482, in 1861. Area of state, 127 square miles. The city is built on a gentle ridge, on one side of which runs the Trave, and on the other the Wackenik. The environs are well wooded, and enlivened with cheerful villas, particularly those along the banks of the Trave. The streets, which are steep, are wider than those of Hamburg. The houses generally appear to be old, and mostly built of stone; like those of Hamburg and Antwerp, their gable ends face the street. They are in general very lofty, 6 or 7 stories not being uncommon. On the old ramparts of the city is a promenade shaded with fine trees. The principal buildings are the cathedral, 5 churches, and the town-hall. The cathedral is a curious old building with spires much out of the perpendicular. The church of St. Mary is handsome in the interior, and some good paintings of ancient date. Among them is the celebrated picture of the Dance of Death, usually attributed to Holbein, but which belonged to the town for at least 35 years before Holbein's birth. Behind the high altar is an old astronomical clock, constructed in 1405, which exhibits at a certain hour figures representing the Twelve Apostles, who sally forth and march in regular succession, passing a figure of the Saviour, to whom they each face round, and having made a quick and familiar nod of the head, they then march onwards to a door on the opposite side, which closes upon them the moment the twelfth apostle has entered. The church has also a fine organ, erected in 1855.

The cathedral, begun in 1170, and finished in 1341, has many monuments of the senatorial families of Lübeck, some of which are well executed, and, among others, a curious picture, by Hans Hemling, dated 1471, the subject of which is the Passion of Christ, treated in 23 distinct groups. The town-hall, a turreted Gothic building, faces the market-place. It was the place of assembly for the deputies from the cities formerly comprised in the Hanseatic League; but the hall in which they held their meetings was destroyed in 1817. Lübeck has a Calvinist and a R. Cath. church, an exchange, arsenal, and mint, several hospitals and benevolent institutions, a gymnasium, a city-school, ecclesiastical and teachers' seminaries, schools of surgery, midwifery, navigation, drawing, swimming, and numerous other schools, a public library of 60,000 vols., a society of useful sciences and arts, a bible society, a house of correction and prison, and a theatre.

Lübeck, though by no means so prosperous and important as formerly, is still a thriving commercial town. Many of its modern-built houses are on a grand scale. Their basement-stories are used as magazines or warehouses, and they have commonly large court-yards into which the carriages of the proprietors are driven. In Lübeck and its territory are numerous breweries, distilleries, iron forges, and linen yarn factories; besides manufactures of hats, vinegar, starch, tobacco and snuff, wax lights, paper and cards, musical instruments, with numerous oil and other mills, several printing establishments, and a few woollen, cotton, and golden and silver lace factories. Its trade is principally confined to the N. and W. of Europe. Upwards of 1,600 vessels a year enter

Digitized by Google

and leave its port; they are principally Danish, the rest being Russian, Swedish, Lübeck, Dutch, English, and Prussian. Lübeck communicates by means of the Trave and a canal, as well as by railway, with Hamburg, with which it has an extensive intercourse. The principal article of export is corn: the principal articles of import are wines and silks, from France; cottons, hardware, and other manufactured goods, from England. It has an extensive commission and transit trade, and considerable markets for wool, cattle, and horses. Vessels of considerable burden load and unload by means of lighters at Travemunde, at the mouth of the river, which is properly the port of Lübeck. Steam-boats, of small draught of water, ply on the river between the city and its port. Steamers also sail at fixed periods for Petersburg, Stockholm, and Copenhagen.

Accounts are kept in marks of the value of 1*s.* 2·67*d.* each, divided into 16 schellings of 12 pfennigs. The Lübeck rix-dollar, equivalent to 3 marks, is worth 4*s.* 6·72. The lb. = about 18 oz. avoird.; 112 lbs. = 1 centner.

The territory subject to Lübeck consists of a district of 82 sq. m., immediately adjacent to the city, surrounded by the territories of Mecklenburg, Holstein, and Oldenburg, and the Baltic; of numerous small detached portions of surface enclosed by Holstein; and of the *Vierländer*, and town of Bergedorf, the sovereignty over which it shares with Hamburg. The land is very productive, yielding good crops of corn, fruit, and kitchen vegetables; but the rearing of live stock is the chief occupation of the rural pop. The government is vested according to the constitution of 1851, in the senate and house of burgesses (bürgerschaft); the former consists of 14 members, elected for life, and is presided over by two burgomasters, who hold office for two years each and retire in rotation. There are 120 members in the house of burgesses, elected by all citizens, who are members of any of the twelve guilds of the city. The house of burgesses has the initiative in all deliberations relative to the public expenditure, foreign treaties, &c.; the senate is entrusted chiefly with the executive duties, but its sanction is necessary to the passing of new laws. Public revenue, 1,303,371 marks, or 76,663*l.* in 1862; expenditure about equal. Lübeck has one vote in the full council of the German Confederation, and, along with the other Hanse Towns, a vote in the committee. It furnishes a contingent of 679 men to the army of the Confederation.

It is uncertain when or by whom this city was founded, but no doubt it existed *anno* 1140. Early in the 13th century, the emperor Frederick II. made it one of the free towns of the empire; and, from 1260 to 1669, Lübeck was the repository of the archives of the powerful association of cities included in the Hanseatic League, and the station of the confederated fleet. The dissolution of the League marked the epoch of the decline of Lübeck. After the battle of Jena, Blucher threw himself into Lübeck, which, after a severe engagement, was taken by the French, and sacked. In 1810 it was made the cap. of an arrond. in the dép. Bouches de l'Elbe; but was restored to rank, as a free city, by the Congress of Vienna in 1815. Sir Godfrey Kneller, the painter, Mosheim, the historian, Meibomius, and H. Muller, were natives of Lubeck.

LUBLIN, a city of Russian Poland, cap. of the palatinate of Lublin, in a marshy situation, on the Bistrzyca a tributary of the Wieprz, 97 m. SE. Warsaw. Pop. 18,304 in 1858. Lublin is subdivided into the old and new town, the former situated on an eminence, and the latter on the bank of the river. Formerly, the city was fortified by a wall and ditch, but these works were destroyed in the civil wars towards the end of the 18th century. It has still, however, a citadel standing on a high rock, and the ruins of a castle built by Casimir the Great. Its streets are irregular and its houses mostly of wood. The principal edifices are a handsome town-hall, the Sobieski palace, the cathedral, the churches of the Dominicans and Carmelites, and that formerly belonging to the Jesuits. There are in all 18 churches and 12 convents, 6 nunneries, a spacious synagogue, an episcopal seminary, a Piarist college, several civil and military hospitals, an orphan asylum, and a theatre. Lublin is a bishop's see, and the seat of the second court of appeal in Poland. It has manufactures of coarse woollens; considerable trade in woollen cloth, corn, and Hungarian wines; and three large yearly fairs, each lasting a month, and attended by German, Greek, Armenian, Arabian, Russian, Turkish, and other traders.

LUCCA, a former state of Central Italy, now composing the province of Lucca. Pop. 242,542 in 1862; area, 1,450 square chilos, or about 420 square miles. The Apennines skirt the N. part of the province, 2-3ds of which they cover with their ramifications; but none of these rise to the height of 4,000 ft. The rest of the surface is a low but fertile plain, which becomes marshy towards the coast. The general slope of the province is from N. to S., in which direction it is traversed by the Serchio near its centre. This river is not navigable, but is of great use for irrigation; most of the other streams in the prov. are its tributaries. Near the shore are some small lakes. The soil, which is calcareous and stony in the N., is sandy in the S., and rich in the intermediate region. The pop. is chiefly agricultural, but the corn produced is not sufficient for home consumption; the deficiency being principally supplied by beans, which are largely cultivated, and partly, also, in the mountainous districts by chestnut flour. The latter is sometimes exported to the neighbouring provinces, the price varying from 6*s.* 8*d.* to 10*s.* a sack. The culture is extending of all the articles for the production of which the soil and climate afford facilities. The number of mulberry trees has rapidly increased of late, and the manufacture of olive oil has been materially improved. The latter is esteemed the best in Italy and fetches the highest price, especially that grown on high grounds. It is exported to the value of about 32,000*l.* a year. Wine is said to give a fair return to the cultivator; hemp and flax are raised, and the produce of silk is very considerable. Lucca was early distinguished by proficiency in the silk manufacture; and, in 1319, the culture of the mulberry became an object of public attention. Rice is grown near the coast, in which neighbourhood also most of the cattle in the province are reared. There are nearly 25,000 landed proprietors, of whom a large part have necessarily very small properties, and belong to the class of agricultural or manufacturing labourers. The principal causes which have led to this subdivision of the land, as well as to the rapid increase and great density of the pop., appear to be the habit of dividing leasehold property equally among the males of a family, the suppression of monasteries, and the abolition of entails.

The *métayer* system of agriculture is not so prevalent here as in other parts of Italy. The ordinary wages of country labourers vary from 5*d.* to 6½*d.* a day with food: farm labourers, who dwell with their masters, get from 45 to 55 lire a year.

Digitized by Google

The mountaineers, who depend almost entirely upon the culture of the chestnut, are said to be in a better condition than the peasantry of the hills and plains. The inhabitants of the districts of Pontito and Sciappa are in particular distinguished by their robust and healthy appearance, and by the beautiful complexion and regular features of the women. This last circumstance is the more remarkable, as, during a great part of the year, these women have to bear the whole burden of domestic labour; while their husbands, fathers, and brothers emigrate to the Tuscan Maremme, and the North Italian provinces, in search of harvest and other work. During winter, about 2,600 labourers set out for these territories, and return in summer, bringing with them their small savings, the aggregate of which may amount to 10,000*l*. Most of the Italian image and plaster-cast-makers, in other countries of Europe, are emigrants from this province. Mining is little or not at all pursued, though copper, iron, and lead ores are met with. Statuary marble and other fine marbles are found in great abundance. From 5,000 to 6,000 hands are employed in the manufacture of silk, wool, and cotton; and there are about 30 paper factories, and others of linen cloth, straw and beaver hats, leather, glass, and iron goods. The city of Lucca is the chief seat of manufacturing industry.

The value of the exports of the province amounts to about 4 million lire a year, more than 1-4th part of which is derived from oil and silk. These articles go chiefly to other parts of Italy, and to France, England, and the Levant. Grain, seeds, wine, liqueurs, live stock, lambskins, and fresh fish are sent to Florence and Rome, and woollen goods to the rest of Italy and the Levant. The imports, which mostly come through Leghorn, consist principally of grain, seeds, rice, fine wines, hemp, flax, cotton, colonial products, and salted provisions.

Lucca, like the rest of Italy, experienced many changes in the middle ages. The city of Lucca attained its liberty after the decease of the Countess Matilda, in 1115, when it became an independent republic. In the next century it again fell under feudal authority, and afterwards belonged successively to Louis the Bavarian, and to noble Genoese, Parmesan, Veronese, and Florentine families. In 1370, it again obtained its liberty, by purchase, from the emperor Charles IV., for 100,000 crowns; and from that date to 1805, it was governed by its own *gonfalonieri*. Napoleon united Lucca with Piombino in a principality; the Congress of Vienna, in 1814, erected it into a duchy. But in virtue of arrangements consequent on the death, in 1847, of the Archduchess Maria Louisa, the greater part of Lucca was added to Tuscany, and the rest to Modena, until the whole of it was annexed, in 1860, to the new kingdom of Italy.

Lucca (anc. *Luca*), a city of Italy, cap. of prov. of same name, in a plain near the left bank of the Serchio, 11 m. NE. Pisa, and 38 m. W. Florence, on the railway from Bologna to Leghorn. Pop. 64,666 in 1862. The city is surrounded with walls; which would form, however, but a very feeble defence against an enemy. The towers of the churches, rising above the ramparts, have a fine effect in the rich and beautiful landscape, the view being bounded by vine-clad hills spotted with villas, over which tower the craggy Apennines. On a nearer inspection, the public buildings are less pleasing in their architecture than in their distant effect; yet many of them are very curious structures. The churches are all, more or less, imitations of the cathedral at Pisa; smaller, indeed, in size, but some of them superior in the proportions and disposition of the parts. Most of the churches are built of Carrara marble. The cathedral, mostly constructed in the 11th century, has much carved, inlaid, and mosaic work; a rich display of stained glass; a Madonna, by Fra Bartolommeo, and some pictures of the Venetian school. The churches of San Michele and San Frediano are both ancient. The latter belonged to a monastery restored and enriched towards the close of the 7th century. The former ducal palace, now converted into the seat of the provincial government, is a large structure, the exterior of which presents nothing remarkable. The *Palazzo Pubblico*, the residence of the *gonfalonieri*, in the days of the republic, is an immense and noble edifice, which makes the city round it look little. There is a small but handsome theatre. Lucca is generally well built; many of the private houses are very good, though their pointed roofs and gable ends give it the aspect rather of a Flemish than an Italian city. The streets, though crooked, are broad and well-paved; and the ramparts, planted with trees, form pleasing promenades. It has several colleges, a seminary, founded by Eliza, princess Bacciochi, sister of Napoleon, for 100 young ladies, a botanic garden, a ducal library with 21,000 vols., a university library with 16,000 vols., and a savings' bank. The city enjoys the title of *l'industriosa*, and is one of the principal inland commercial towns in Italy. Its manufactures mostly consist of silk and woollen fabrics. The city has also a considerable trade in olive oil. About 12 or 13 m. up the valley of the Serchio are the baths of Lucca, picturesquely situated, and frequented by numerous visitors. The temperature of the hottest spring is about 128° Fah.

Lucca was colonised by the Romans A.U.C. 575. It was a municipal town, and frequently the head quarters of Cæsar, during his command in Gaul. Traces of a Roman amphitheatre are still discoverable. This city was taken by the French in 1799; and, in 1805, Napoleon made it the cap. of a principality he erected for his sister's husband, Bacciochi.

Lucena (an. *Elisana*), a town of Spain, in Andalusia, prov. Cordova, 31 m. SSE. Cordova, and 82 m. E. Seville. Pop. 14,800 in 1857. The town stands on the slope and at the foot of a hill, comprising some respectable streets, lined with good houses, two squares, and agreeable suburbs. The neighbourhood is distinguished for the abundance of its produce in fruit and grain, which chiefly contributes to the support of the pop.; but the processes of tillage are of the rudest description.

Lucera (an. *Luceria*), a city of South Italy, prov. Foggia, cap. canton, on a height abrupt towards its N. side, 12 m. WNW. Foggia. Pop. 14,517 in 1861. The houses of the city, which are all tiled, are generally good; but the streets are narrow, ill-paved, and dirty. Some ancient walls, in very bad condition, inclose it; and 5 gateways open from them to an outward road, which winds entirely round the town. A few gardens and convents are scattered about, and these, with some olive plantations and vineyards, in which the natives have small country houses, contribute greatly to enliven and diversify the prospect. The vines are trained low, and supply the proprietors with a good strong white wine. About ¼ m. from the city, on the edge of the same eminence, is the castle of Lucera, a ruined Gothic fortress, erected by the emperor, Frederick II. The extent of its walls would almost lead to the belief that they surround a second city; but they at present encircle only an empty area, overgrown with grass.

Digitized by Google

There can be no doubt, from the Roman inscriptions and pieces of sculpture found within the area of this building, that its situation is identical with that of the citadel of the anc. *Luceria*, taken by the Samnites, after the defeat of the Romans at the Caudine Forks, and afterwards retaken by L. Papirius. This castle is a very conspicuous object; it has a deep moat, a drawbridge, 2 large round towers, one supporting the telegraph which communicates with Foggia, and the other a piece of masonry, built with consummate skill: in the interior of its area are traces of extensive cisterns. The cathedral of Lucera was formerly a Saracenic mosque, and preserves, on the exterior, some marks of its origin. It has a pulpit adorned with that kind of Byzantine mosaic, of which the cathedral of Salerno offers so fine a specimen; but its principal ornaments are 13 beautiful pillars of verd antique, originally found under the cathedral itself, and supposed to have belonged to a temple of Apollo: the capitals are modern. Facing this church is the bishop's palace, considered the finest piece of architecture in Apulia. The tribunal and other public edifices render the appearance of this part of the city somewhat imposing. The *Tribunale* includes the criminal and civil courts for the prov., the register-office, the notarial chamber, the residences of the president and judges, and the public prisons. Lucera has a royal college, and an extensive private collection of coins, medals, and antiquities. Great numbers of cattle are kept in its neighbourhood, and its cheese is held in great repute.

Lucera is said to have been founded by Diomed, and was the cap. of Daunia under the Greeks; it afterwards became a Roman colony. Having fallen into decay, it was renovated in 1339, by Frederick II., who transported thither a colony of Saracens from Sicily, to whom he gave great privileges. In 1369, however, Charles of Anjou expelled from the Neapolitan dominions such Moors as refused to embrace Christianity, and converted the mosque of Lucera into a church. Numerous antiquities of various ages have been discovered in and about Lucera.

LUCERNE (CANTON OF), a canton of Switzerland, ranking third in the Confederation, between lat. 46° 47′ and 47° 17′ N., and long. 7° 50′ and 8° 29′ E.; having N. Solothurn and Aargau, E. Zug, Schwytz, and Unterwalden, and S. and W. Berne: length NE. and SW. 36 m., breadth varying from 8 to 30 m.; area, 587 sq. m. Pop. 130,975 in 1860. The great bulk of the pop. are Roman Catholics. The surface in the N. is generally plain, undulating in the centre, and rising gradually towards the S., where are several mountain-ranges of considerable height. The principal of these is M. Pilate, between Lucerne and Unterwalden, its highest summit, the Tomlishorn, being estimated at 7,128 ft. above the level of the sea. The S. and E. parts of the canton are watered by the Reuss and Little Emmen; the other rivers are the Wigger, Sur, and Vinon, all having a N. course, and joining the Aar in Aargau. The Lake of Lucerne (which see) forms a part of its E. boundary, and the cant. comprises several small lakes, as that of Sempach, 4 m. in length, and memorable for the battle fought on its banks, 9th July, 1386 (see SEMPACH), those of Baldegg, 3 m. in length, and of Mauen. The climate is mild, and the soil more favourable to agriculture than that of most of the neighbouring cantons. More corn is grown than is required for home consumption. But industry is not nearly so active as in the neighbouring cantons of Berne and Zurich. The vine flourishes in some parts, fruit is plentiful, and wine and cider are produced; but the chief occupations of the people are cattle breeding and dairy-husbandry. The Entlibuch, or valley of the Little Emmen, about 25 m. in length, affords pasturage for about 7,000 head of cattle, and 11,000 sheep and goats: the inhab. make large quantities of cheese, which, though not so good as that of the Emmenthal in Berne, is exported as the produce of the latter district. The inhab. of this valley are remarkable for their vigour, intelligence, and independent spirit, and are usually richer than those of the rest of the canton; but they are neither so well clothed, nor have such neat cottages as the peasantry of the Emmenthal. Traces of various metals are met with in this canton, but no mines are wrought. Manufacturing industry is unimportant, and is mostly confined to domestic linen weaving and spinning. The inhab. are more occupied in the transit trade from N. Switzerland across the St. Gothard, than in any commercial dealings of their own.

The government is vested in the Council of One Hundred, 50 of whose members are chosen from among the citizens of the cap., and 50 from the inhab. of other parts of the canton. The 18 arrondissements into which the cant. is subdivided, and the three municipalities of Sursee, Sempach, and Villisau, send one mem. each to the council, and the remaining 29 mems. from the rural districts, are chosen by the council itself. The council also nominates 40 of the déps. from the town of Lucerne, the remaining 10 being sent by that municipality. The right of election belongs to every native (bourgeois) of the canton 20 years of age, having property to the amount of 400 fr., and who has not been penally condemned, or is bankrupt. Members of the council must be 25 years of age, and pay taxes on property to the amount of 4,000 fr., or have rendered important services to the state. A body of 36 members, 30 years of age, chosen from among the council, and holding office for life, forms the senate, to which is confided all the executive power. The council meets regularly three times a year, but may be convoked oftener, at the pleasure of the senate. Two *avoyers*, or presidents, are chosen annually from among the senate, by the council, one to preside at the council and the other in the court of appeal. The latter tribunal is composed of 12 mems., chosen from the senate, and has authority in all legal causes, except in cases of capital punishment, when the senate is assembled to pronounce judgment. In ecclesiastical matters, Lucerne is subordinate to the bishop of Basle; but, being at the head of the Roman Catholic cantons of Switzerland, it was the permanent residence of the papal nuncio till 1835, when, in consequence of a dispute with the government, the nuncio removed into the canton of Schwytz. Public instruction is under the direction of a commission of senators; it has been till lately indifferently conducted, but is improving. The public revenue amounted, in 1862, to 982,646 francs, and the expenditure to 887,001 francs. A contingent of 1,734 troops is furnished to the army of the Confederacy.

LUCERNE, a town of Switzerland, cap. of the above canton, on both sides the Reuss, where it issues from the W. extremity of the Lake of Lucerne, 25 m. SSW. Zurich, and 43 m. ENE. Berne, with both which towns it is connected by railway. Pop. 11,522 in 1860. Its situation is highly picturesque, and its environs abound with pleasant promenades. The town is surrounded by a circle of watchtowers, and on the land side is enclosed by a continuous wall. It is pretty well built, and has several fine public edifices. The cathedral, said to be founded in 695, has a paint-

Digitized by Google

ing of Christ on the Mount of Olives, by Lanfranc, and an organ with nearly 3,000 pipes. The churches of St. Peter and the Jesuits are handsome buildings, and there are several convents; that of the Jesuits has, however, been converted into a lyceum. The most remarkable objects in Lucerne are the four bridges over the Reuss, connecting the great and little towns. Some of these are of considerable length; all of them are covered and ornamented with pictures illustrative of Swiss and Scripture history, or copied from the 'Dance of Death.' The town-hall, where the cantonal council meet, erected in 1606, is, though small, a handsome building. In the arsenal are several suits of ancient armour, including the coat of mail worn by Leopold of Austria, killed at the battle of Sempach. Lucerne has 2 hospitals, an orphan asylum, a mint, a gaol, a theatre, public libraries belonging to the town, the Jesuits, Cordeliers, and Capuchins, and a lyceum with 14 professors of theology, law, natural and moral philosophy, history, mathematics, and the fine arts. Attached to the lyceum is a large public school. Into this school every child until the age of twelve is admitted, upon payment of six francs a year, and is taught reading, writing, arithmetic, and the first principles of Latin. This privilege of acquiring, in early years, the rudiments of learning, is not confined to the city of Lucerne, nor even to the canton; persons may claim admittance from any other of the Swiss cantons, and even from foreign countries. The college and the school are one establishment; and every one who has received his education in the school is immediately received as a pupil of the college, and pays nothing for his instruction there. The original fund for this establishment amounted to 400,000 fr., but has subsequently been greatly increased by donations. The institutions for the intellectual and moral improvement of the inhab. are on a scale of great liberality, though education is far from being widely diffused either in the city or the canton generally. In the town is the celebrated model in relief of Switzerland, made by General Pfyffer; and in the Pfyffer Garden, outside the walls, is a monument, from a design by Thorwaldsen, to commemorate the Swiss guards who fell at Paris in the memorable attack on the Tuilleries, on the 10th of August, 1792. It represents a lion of colossal size, wounded to death, with a spear sticking in his side, yet endeavouring with his last gasp to protect from injury a shield bearing the fleur-de-lis of the Bourbons, which he holds in his paws. The figure, hewn out of the sandstone rock, is 28 ft. long and 18 ft. high, and its execution merits great praise.

The city of Lucerne was given by Pepin in 768 to the abbots of Murbach and Alsace; to whom it belonged till towards the end of the 13th century, when it was sold to the house of Hapsburg. But in 1332, the citizens, impatient of the Austrian yoke, rebelled, and joined the three primitive cantons of the Swiss Confederacy. In less than 30 years they conquered the territory which now forms the canton. The town was taken by the French, May 1, 1798, and was for eight months the cap. of the Helvetic government.

LUCERNE (LAKE OF), (Germ. *Vier-Waldstätter See*, or the Lake of the Four Forest Cantons), a lake of Switzerland, in nearly the centre of that country, between the cantons of Lucerne on the W., Schwytz N., Uri E., and Unterwalden S. It is the largest and decidedly the finest lake in the interior of Switzerland, and one of the most picturesque in Europe. It is of a singular cruciform shape, with an addition to its E. end, termed the Lake of Uri. Its greatest length is about 25 m.; but the breadth of any of its arms is seldom more than 2 or 3 m. Area estimated at 43 sq. m.; height of its surface above the level of the sea, 1,380 ft.; depth varying from 300 ft. near Lucerne to 900 ft. near its E. end. The Reuss traverses this lake in its entire length, emerging from it near its W. extremity. Its banks exhibit every gradation of scenery, from a gently rising and fertile country at its W. end, to rugged and savage sublimity on the Lake of Uri. Its E. and S. parts are surrounded by mountains rising to many thousand feet above the sea, the chief of which are Mounts Pilate and Righi. Its shores abound in localities memorable in early Swiss history. At the N. extremity of what is called the Lake of Uri is the little town of Brunnen, where, in 1315, a treaty was entered into by Uri, Schwytz, and Unterwalden, which gave birth to the Helvetic Confederacy. Like all mountain lakes, it is subject to violent tempests; and in consequence of the different positions of its different arms, and the influence of the surrounding mountains, different winds seem to prevail in different parts of its extent at the same time. Steamers ply regularly between Lucerne at its W. and Fluelen at its E. extremity, calling at the intermediate ports.

LUCIA (ST.), one of the British West India islands, belonging to the Windward group; in lat. 14° N., and long. 61° W., about 20 m. NNE. St. Vincent, and 25 m. S. Martinique. It is of an oblong shape, being nearly 32 m. in length by about 12 m. in its greatest breadth. Its area comprises 158,620 acres, with a population, in 1863, of 28,135, of whom about 27,000 coloured people. The central and E. parts of the island are occupied by the table-land called Capisterre; the W. part, which has a much less elevation, is called Basseterre. These two districts differ widely in physical aspect; but each, in an eminent degree, is subject to the operation of those agencies which are supposed to exert a baneful influence on the health of Europeans in tropical climates. Basseterre, the best cultivated portion of the island, abounds in swamps and marshes. Capisterre consists of a succession of abrupt mountains of the most picturesque and fantastic shapes, covered to the summit with forest trees and dense underwood, and intersected by numerous ravines, which, being too narrow to admit of free ventilation, are at all times replete with moisture, and choked up with decayed vegetation in every stage of decomposition. The climate is principally characterised by extreme moisture and variableness. During several months, but particularly in Oct. and Nov., rain is incessant, and showers are frequent for at least nine months of the year. Cool dry weather generally sets in about Christmas, and continues three or four months, at which time the climate is exceedingly pleasant, though not more healthy, since it is at that period of the year that the greatest mortality prevails. During the rest of the year the weather is sometimes dry and sultry, at others cold and damp, exhibiting a difference of 10 or 12 degs. of temperature in a few hours. The range of the thermometer is much the same as at Dominica. Nearly 9,500 acres are under crops, and 4,700 in pasture. The mountains are feathered to the top with tall forest trees, and the valleys at their feet abound with excellent timber.

St. Lucia has several good harbours, the chief being the Carenage on the W. coast, within which thirty ships of the line may lie in perfect security, without even, as is stated, being moored. The wish to command this admirable harbour was the motive which made the island formerly so much coveted by the European powers.

Digitized by Google

The quantities and value of the principal articles exported from St. Lucia, in each of the years 1861 and 1862, was as follows:—

Principal Articles	Quantities		Value	
	1861	1862	1861	1862
			£	£
Cocoa . lbs.	238,213	191,392	5,757	2,770
Molasses gals.	115,680	104,800	3,711	3,668
Rum . ,,	11,040	8,275	848	443
Sugar . lbs.	9,594,000	8,762,415	80,927	76,714
Total Value of Exports . .			96,321	87,992

The total imports, in 1863, amounted to 69,583*l.*, and the total exports to 83,711*l.*

The island is divided into 9 parishes. Castries, the cap., lies in a low and marshy situation, at the extremity of a long and winding bay of the same name. The fort, where most of the troops in the island are stationed, is built on the summit of a steep hill, called Morne Fortuné, about 1½ m. from Castries, and 850 ft. above the level of the sea. Near it is the principal hospital. Another hospital and some barracks are erected on Pigeon Island, a small, conical, and extremely unhealthy islet, near the N. extremity of the island. St. Lucia is governed by a governor and council, acting under orders from England. The mutual jealousies of England and France prevented, for a lengthened period, a permanent settlement being made on the island, which was then regarded as a sort of neutral territory. At length it was ceded to the French in 1763. But being taken by English troops in 1803, it was definitively assigned to Great Britain by the treaty of Paris.

LUCKIPOOR, a town of Hindostan, prov. Bengal, distr. Tiperah, a few miles from the mouth of the Brahmaputra, with which it communicates by a small river, 156 m. ENE. Calcutta; lat. 22° 56′ N., long. 90° 43′ E. Coarse cotton cloths of a substantial kind are made here; and the neighbourhood is so fertile and productive, that Luckipoor is one of the cheapest towns in British India.

LUCKNOW (Hind. *Lakshmanavate*), a large city of Hindostan, cap. of the former kingdom of Oude, on the Goomty, a tributary of the Ganges, about 150 m. NW. Benares, and 265 SE. by E. Delhi, on the 'Indian branch' of the East Indian railway. Pop. estim. at 250,000 in 1862. The city, when viewed from the summit of a lofty edifice, presents a confusion of gilded cupolas and pinnacles, turrets, minarets, and arches, bounded by the winding Goomty, and so thickly interspersed with the richest tropical foliage, as apparently to realise the most fantastic visions of Oriental splendour. A nearer inspection, however, does not fulfil the anticipations which a bird's-eye survey is calculated to excite. It may be divided into 3 quarters. The first is the city, properly so called, containing the shops and private dwellings of the inhabs. The streets here are sunk 10 or 12 ft. below the surface, and are so narrow that two carts cannot pass; besides being filthy in the extreme. The chowk, and one or two bazaars in its vicinity, are good streets; but, on the whole, this extensive quarter is more meanly built than, perhaps, any city of the same rank in Hindostan. The second quarter of Lucknow was built mostly by the late nabob, Saadet Ali. It stands near the Goomty, towards the SE., and consists of one very handsome street, after the European fashion, above a mile in length, with bazaars striking out at right angles, and a well-built *chowk* or market-place in the centre, with a lofty gateway at each extremity, which presents a Grecian front on one side, and a Moorish one on the other. The houses that compose the remainder of this street are, for the most part, in the English style, but with an occasional mixture of Eastern architecture. The same remark applies to the palaces that occupy the space between this street and the river. All these palaces are filled with European furniture and pictures, and may rank with comfortable English houses; but none is on a scale of royal magnificence. The former royal residence only excels the others in being approached through spacious courts, with reservoirs, fountains, and innumerable pieces of cast statuary. The adjacent buildings of the British Residency terminate the great street to the N. At its opposite extremity is the entrance of the Delkusha Park, an artificial wilderness of high grass, with which Saadet Ali clothed the arid tract between Lucknow and Constantia, and well stocked with deer, antelopes, and peacocks. The third quarter of the city adjoins the Goomty to the NW., being only separated by a bazaar from the second. It consists chiefly of religious buildings; and being in a style more purely oriental than the modern portion of the city, is the most interesting quarter to a stranger. The magnificent pile of *Imaum-bârah*, with its noble gateway, called the *Roumi-derwasseh*; the new palace built, but never finished, by Saadet Ali, the *Dowlet-khanah*, and other edifices are the chief ornaments of this division of Lucknow.

There are many stately *khans*, and some handsome mosques and pagodas scattered in different parts of the wretched alleys, of which the city chiefly consists; but the most striking buildings, as in other Mohammedan capitals, are the royal tombs and mosques. Of these the *Imaum-bârah*, or tomb and mosque of Asophud Dowlah, is the chief. The *Roumi-Derwazah*, so called from being supposed a copy of one of the gates at Constantinople, is in a light and elegant, though fantastic style, and a mixture of Gothic and Moorish architecture.

About 3 m. from Lucknow is Baroun, a country seat of the former ruler of Oude. It is in a Grecian style of architecture, and ornamented by a very fine portico, rising the whole height of the house in front. Near the city is also Constantia, the former residence of a general in the E. I. Company's service, and erected at an expense of 7 lacs of rupees; but this building is in wretched taste, and only imposing at a distance.

Lucknow is traditionally said to have been founded by *Lakshman*, the brother of *Rama*; who had his residence here, to extinguish the recollection of which Aurungzebe erected a mosque with two minarets on its site. After the battle of Buxar, Shuja ud Dowlah removed his court from Lucknow to Fyzabad; but on his death, in 1775, his successor made this city again the capital of Oude. Lucknow acquired a tragic fame in the great Indian mutiny, when it was the seat of one of the hardest contests between the British troops and the rebellious native soldiers. The revolt broke out on the evening of the 30th of May, 1857, at the Sepoy cantonments, 2 miles from the city. After some unsuccessful efforts to suppress the mutiny, the small British force, numbering scarce 300 men, had to retire into the Residency, which was immediately besieged by an army of at least 10,000 natives. The heroic defence of the handful of British troops, in a building not designed for a fortress, lasted nearly four months, at the end of which, on the 25th of September, 1857, General Havelock, at the head of two regiments, succeeded in fighting his way through, and dispersing the

Digitized by Google

insurgents. The Defence of Lucknow forms one of the most brilliant chapters in the tragic history of the Indian mutiny.

LUCKPUT-BUNDER, a town of Hindostan, prov. Cutch, of which it is the chief port after Mandavee, on the Khoree, or most easterly branch of the Indus, on the high road from Mandavee to Hyderabad and Tatta, 82 m. SE. by S. the last-named city, and 67 m. WNW. Bhooj. It is defended by a good fort. Early in the present century, it had but 2,000 inhabs.; and, owing to the shallowness of the river, could only be approached by very small craft; but, by an earthquake in 1819, the Indus was deepened at Luckput to more than 18 ft. at low water, and there is now 20 ft. water in its channel from the ocean to Busta, 8 m. below this town.

LUDLOW, a mun. and parl. bor., market town, and par. of England, co. Salop, hund. Munslow, on the Teme, 24 miles S. Shrewsbury, 32 miles W. by S. Birmingham, 126 miles WSW. London by road, and 143 miles by Shrewsbury and Hereford railway. Pop. of municipal borough 5,178 and of parl. bor. 6,033 in 1861. The town is neat and well-built, and the streets are generally wide, well-paved, and lighted. On a bold rock, overhanging the river, at the NW. angle of the town, stands the castle, supposed to have been built in 1130. The walls and towers which still remain present a mass of extensive and magnificent ruins; and round the castle are public walks shaded with trees, from which there is a fine prospect of the surrounding country. Near the centre of the town is 'the Cross,' a handsome stone building, with rooms over it used as a school; and in Castle Street is the market-house, the lower part of which is open, and serves as a corn-market, the upper part comprising several large rooms, used for corporation meetings, assemblies and public balls. The guildhall, where the quarter sessions and court of record are held, is a commodious modern structure; and there is a prison called Gaolford's Tower. Performances are given in a small theatre during the races, which are held in the neighbourhood. The parish church, which stands at the upper end of the town, is a large cruciform building of perpendicular architecture, surmounted by a square embattled tower, rising from the intersection. The interior is very beautiful: lofty pointed arches divide the nave from the aisles; and at the end E. of a very spacious choir is a noble window, entirely filled with painted glass: the whole church is ceiled with fine oak, and embellished with carving. The S. entrance is peculiar, consisting of a hexagonal porch richly ornamented. There are places of worship for dissenters, and to both the churches and chapels Sunday schools are attached. The grammar school, founded in the reign of Edward VI., is intended to give free instruction, in English and classical learning, to the sons of all residents within the bor. The pupils comprise about 30 free boys, and the same number of pay scholars boarding with the master, who receives a yearly salary of 100*l.*, and is assisted by an usher. The master holds, also, the office of preacher, with a salary of 48*l.* a year. A national school, under the superintendence of the rector and a committee, is well attended by boys and girls; and is liberally supported, partly by contributions, and partly, also, by the funds of a Bluecoat charity merged into it.

Ludlow, as a place of trade, is of little importance. The glove trade formerly employed several hundred hands; but of late it has greatly diminished. Malting and tanning are carried on to some extent; but the chief business is confined to the retailing of goods consumed in the town and neighbourhood. The corporation charter was granted by Edward IV., and has been subsequently confirmed by 9 different monarchs. Under the Municipal Reform Act, the government is vested in a recorder, 4 aldermen, and 12 councillors. The bor. has returned 2 mems. to the H. of C. since 12 Edward IV.; the right of election, previously to the Reform Act, being nominally vested in the resident burgesses, but substantially in the lord of the manor, Earl Powis. The electoral limits were enlarged by the Boundary Act, so as to include, with the old bor., the township of Ludford, and a part of the par. of Stanton Lacey. Registered electors, 382 in 1865. Market on Monday; fairs, chiefly for horses, cattle, and pigs, Monday before Feb. 13, Tues. before Easter, Wed. in Whitsun. week, Aug. 21, Sept. 28, and Dec. 6; on the two last of which large quantities of hops are exposed for sale.

The history of Ludlow is closely connected with that of its castle, which, being erected by the barons of Montgomery in the 12th century, continued in a habitable state till the suppression of the council of the Marches of Wales by William III. To all lovers of English poetry this castle is interesting, as having been the scene where Milton's 'Comus' was performed, in 1631, by the family of the earl of Bridgewater.

LUDWIGSBURG, a town of Würtemberg, circ. Neckar, of which it is the cap., on rising ground, about 1 m. W. of the Neckar, and 8 m. N. Stuttgard, on the railway from Stuttgard to Heidelberg. Pop. 11,201 in 1861. It is one of the best laid out and handsomest towns of the kingdom. Charles Street, by which it is traversed from end to end, is 1 m. in length, and, like most of the other streets, is lined with rows of trees. From 1727 to 1733, Ludwigsburg was the chief residence of the court: its palace, though now deserted, is one of the largest and finest in Germany; and it has a gallery of old German, Dutch, and Flemish pictures, and a theatre. The palace-gardens, formerly celebrated for their beauty, are now falling into disorder from neglect. Ludwigsburg has a Lutheran parish church, three other churches, an arsenal, a military school for 20 officers' sons, a lyceum, an orphan asylum and workhouse, house of correction for females, school for poor children (*kinderrettungsanstalt*), a cannon-foundry, and manufactures of woollen and cotton cloth, earthenware, and buttons. In the neighbourhood are the royal summer palaces of Favourite and Monrepos, and the fine statue of Count Zeppelin, erected by King Frederick of Würtemberg. About 6 m. distant is Marbach, the birthplace of Schiller, and the mathematician Mayer.

LUGANO, a town of the Swiss canton of Tessin, on a bay on the W. bank of the lake of same name, 15 m. NNW. Como, on the railway from Como to Bellinzona. Pop. 5,397 in 1860. Lugano is a well built, handsome town, finely situated round the curve of a beautiful bay, surrounded by an amphitheatre of hills, having their slopes studded with villas, vineyards, gardens, and forests; while in the distance are seen the snowy pinnacles and craggy masses of the Alps. Among the principal public buildings are the church or cathedral of San Lorenzo, on an eminence above the town, commanding a fine view, with a finely sculptured portal and a façade, said to be by Bramante; the church of the Franciscan friars, remarkable for two paintings of first-rate excellence, by Bernardo Luini. It has also some extensive silk manufactures, a large theatre, and a hospital. The town derives its principal support from being on the route, and one of the entrepôts, of a considerable portion of the trade carried on be-

Digitized by Google

tween Italy and Switzerland, and Germany, by the pass of St. Gothard. Though nominally and politically Swiss, the Luganese are Italians in dress, language, manners, and appearance. Monte Caprino, near Lugano, has a great number of natural caverns or grottoes, which, on account of their coolness, are used by the inhabs. in summer as cellars for their wine, meat, and other provisions.

The Lake of Lugano (formerly the *Lacus Ceresius*), is principally within the canton of Tessin, in Switzerland, but partly also in Italy, between the Lago Maggiore and the Lago di Como. It is of an extremely irregular figure: its greatest length from Porlezza at its NE. to Porto at its S. extremity, is about 16 m.; but, in addition to its main body, it has two great arms, one stretching SSE. to Lago, and the other N. to Agno. It is nowhere above 2 m. in width, and is mostly surrounded by high mountains, overhanging woods, and bold, abrupt precipices. One of the mountains, San Salvador, on a promontory, washed on two of its sides by the lake, rising to the height of nearly 2,000 ft. above its level, is a sublime object from the lake, and commands from its summit a most magnificent and varied prospect. In some parts, however, the banks of the lake slope gently down to the water's edge, and are covered with villages, vineyards, and gardens. The bay of Lugano on its W. side, with its surrounding amphitheatre of hills, is particularly fine. Its waters are quite transparent, and so very deep, that in some places no soundings are said to have been attained. It is above 190 ft. above the level of the lakes of Como and Maggiore, into the latter of which the Tresa conveys its surplus waters.

LUGGERSHALL, or LUDGERSHALL, a decayed bor., market town, and par. of England, co. Wilts, hund. Amesbury, 25 m. NE. Salisbury, and 68 m. W. by S. London. Area of par. and bor., 1,660 acres. Pop. 595 in 1861. The town, now in a wretched and decaying state, contains nothing worth mention, except an old ruinous church, and a place of worship for Baptists; the inhab. are chiefly supported by agricultural labour. Formerly, however, it must have been a place of more importance; for a large castle existed here soon after the Conquest; it was also one of the most ancient parl. bors., and notwithstanding its insignificance in modern times, sent 2 mems. to the H. of C. down to the passing of the Reform Act, by which it was disfranchised.

LUGO, a town of Spain, prov. Galicia, and a bishop's see, on the Minho, 47 m. ESE. Corunna, and 142 m. NNE. Oporto. Pop. 8,054 in 1857. The town occupies an eminence on the E. bank of the river, and is surrounded by an ancient wall of great thickness, with circular projecting towers. The streets are mean and irregularly built: the chief buildings are a Gothic cathedral, 4 convents, 2 hospitals, a singular-looking prison, a foundling asylum, and public seminary. The climate is alleged to be colder than that in other parts of Galicia: snow is frequent, and N. winds are common during the winter months. The place appears to be in a languishing condition; the only fabrics are those of thread stockings and Morocco leather. In the neighbourhood are bred great numbers of cattle, horses, mules, sheep, and hogs, which meet with a ready sale at the monthly fairs, and the great fair in October.

Lugo is a place of great antiquity, having been the cap. of a *conventus*, or district, under the Romans, who called it *Lucus Augusti*. Many monuments of Roman art were existing till the last century, but they have nearly all been since destroyed. The Roman medicinal baths are still, however, used, and the works formed to protect them from the floods of the Minho may yet be traced. Alonzo the Catholic wrested Lugo from the Moors, and re-established its bishopric.

LUND, a city of Sweden, near its S. extremity, prov. Malmæ, 20 m. NE. Malmæ, on the railway from Malmæ to Stockholm. Pop. 9,323 in 1861. The city is open and irregularly built, but clean. It is an archbishopric, and has a cathedral, an ancient irregular building, raised at different periods. But it is chiefly remarkable for its university, founded in 1666. This institution has 22 regular and 7 assistant professors, and is attended by about 600 pupils. It has a library of 50,000 printed vols. and 1,000 MSS., with museums of natural history and mineralogy, antiquities and medals, an observatory, a chemical laboratory, and a botanical garden. Puffendorf, who, next to Grotius, is the great authority in matters of public law, was appointed professor of the Law of Nature and Nations in this university in 1670; and here, in 1672, he published his work *De Jure Naturæ et Gentium*. 'Without,' to use the words of a distinguished authority, the genius of Grotius, and with very inferior learning, he has yet treated this subject with sound sense, with clear method, with extensive and accurate knowledge, and with a copiousness of detail sometimes indeed tedious, but always instructive and satisfactory.' (Mackintosh on the Law of Nature and Nations, p. 21.) Linnæus was for some time a pupil in the university of Lund. The town has manufactures of woollen cloths and tobacco, tanneries and sugar refineries, a discount bank, and some foreign trade. It has also a recently erected statue of the poet Tegner. The ancient kings of Scania were chosen on the hill of Lybers, near the town.

LÜNEBURG, a town of the kingd. of Hanover, cap. of the distr. and principality of Lüneburg, on the Ilmenau, 67 m. NNE. Hanover, and 27 m. SE. Hamburg, on the railway from Hamburg to Hanover. Pop. 14,411 in 1861. The town is surrounded by walls of no great strength, and entered by 6 gates. It has dark and narrow streets, and old-fashioned houses. The castle, or palace of the prince, the town-hall, council-house, academy, gymnasium, exchange, and cavalry barracks, are the principal public buildings. The academy, until 1850, devoted to the education of young nobles, and as such called *Ritterakademie*, is at present a training-school for teachers; it has a library of 14,000 vols. Lüneburg has 4 churches, in one of which are the tombs and monuments of many of the ancient dukes of Lüneburg, several superior schools, and an orphan asylum.

Lüneburg was formerly a Hanse Town, was governed by magistrates of its own selection, and had an extensive trade. It took part in the Baltic herring fishery, and had numerous breweries and manufactures of woollen stuffs, now much fallen off. Lime-burning and the making of salt are at present the chief branches of industry. A large and singular rock of gypsum, rising nearly 170 ft. above the Ilmenau, in the immediate vicinity of the town, furnishes abundant materials for the former business. About 20,000 tons of lime a year are sent to Hamburg, Altona, and Holland. About 160,000 centners a year of salt are procured from some adjacent salt-springs; the evaporation is effected by means of turf, and is conducted under a special commission, the government having a monopoly of the article. Lüneburg has also some fabrics of woollen and cotton and linen goods, tobacco, paper, cards, and soap; with distilleries, breweries, and chemical works. There is a trade in horses, and a large transit trade between Hamburg and the Elbe, and the interior provs. of Hanover.

Digitized by Google

LUNEL, a town of France, dép. Hérault, cap. cant., on the canal of Lunel, 14 m. ENE. Montpellier, on the railway from Montpellier to Nismes. Pop. 6,737 in 1861. The town has a fine promenade, infantry and cavalry barracks, numerous liqueur and brandy distilleries, and a brisk trade in corn, wines, and raisins. The muscadine wine, produced from vineyards situated on gently rising grounds to the N. of the town, and bearing its name, is reckoned by some connoisseurs as the best of its class, and is rivalled only by the Frontignan. The *canal de Lunel* forms part of a great water communication between the Rhone and the Gironde.

LUNEVILLE, a town of France, dép. Meurthe, cap. arrond., on the Vezouze, and on the railway from Paris to Strasbourg, 16 m. SE. Nancy. Pop. 15,528 in 1861. The town is generally well built, and has a good square, a *château* erected by Leopold, duke of Lorraine, early in the last century, and long the residence of Stanislaus, king of Poland, a handsome par. church, very extensive cavalry barracks, a parade ground of 200 hectares, a large covered riding arena, two hospitals, a synagogue, theatre, and manufactures of woollen cloth, woollen and cotton yarn, gloves, and earthenware. Luneville is one of the principal cavalry stations in France. The origin of the town is uncertain, but its name seems to indicate that Diana was anciently worshipped here; and several Roman medals, with the impress of that divinity, have been found near a fountain in the neighbourhood. The peace between France and the German Confederation, in 1801, by which the former acquired the territory on the left bank of the Rhine, was concluded in this town.

LURGAN, an inland town of Ireland, co. Armagh, prov. Ulster, about 3 m. from the S. border of Lough Neagh, and 18 m. WSW. Belfast, on the railway from Belfast to Armagh. Pop. 7,766 in 1861. Lurgan is a clean, thriving, and well-built town, consisting principally of one wide street. It has a par. church, a R. Cath. chapel, meeting-houses for Presbyterians and Quakers, a court-house, and a bridewell. A manor-court is held every three weeks, and general sessions and petty sessions every Friday. It is a constabulary station, and has 2 schools on the foundation of Erasmus Smith, and a subscription school. The linen manufacture, particularly that of diapers and damasks, is extensively carried on, as is that of tobacco; there are 2 breweries and an extensive distillery. Markets on Fridays; fairs, August 5, and November 22. The nearness of the town to the point where the Lagan and Newry navigation joins Lough Neagh, as well as its situation on the Ulster railway, afford great facilities for inland traffic.

The town is on the estate and in the immediate vicinity of the residence of the Brownlow family, to the head of which it gives the title of baron.

LUTON, a market town and par. of England, co. Bedford, hund. Flitt, 16 m. WNW. Hertford, 28 m. NW. London by road, and 32½ m. by Great Northern railway. Pop. of town 15,329, and of par. 17,821 in 1861. The town, pleasantly situated between two hills in the Chiltern chalk range, is irregularly built with three long streets, running from the market-place in the form of the letter Y. The church is an interesting specimen of Gothic architecture, with a square embattled tower surmounted at the angles by hexagonal pinnacles, and a handsomely decorated W. door: the interior contains, besides some painted windows, a curiously carved font, and some fine old monuments. There are also places of worship for Weslevan Methodists, Baptists, and the Society of Friends. Several well-attended Sunday schools, a national and Lancastrian school, furnish instruction to the children of the poor; and there is a well endowed hospital for lodging and clothing 24 aged widows. The inhab. are principally engaged in the manufacture of straw hats, and especially of the variety called the Tuscan grass-plait. Lace-making used also to be carried on to a considerable extent; but this business has been all but extinguished by the rise of the Nottingham frame-lace trade. Two miles E. of the town is Luton Hoo Park, formerly a seat of the Bute family, erected by Lord Bute, the favourite of George III. Markets on Monday; large cattle fairs, April 18 and Oct. 18.

LUTTERWORTH, a market-town and par. of England, co. Leicester, hund. Guthlaxton, 12 m. S. Leicester, 72 m. NNW. London by road, and 92 m. by London and North Western railway. Pop. 2,289 in 1861. The town, situated on the Swift, a tributary of the Avon, comprises one main and well built street, with others of inferior size: there are some good houses, but a large proportion of the tenements are mere mud-walled thatched cottages. The church is a large and very handsome structure, in the pointed style, with a high square tower having turrets at the angles: the interior is elegantly fitted up. But it is principally remarkable from having been the scene of the pastoral labours of John Wyckliffe, and from its containing his pulpit and portrait. This early reformer and eminent divine was appointed rector of Lutterworth in 1374, where he expired 10 years afterwards, on the 31st December, 1384. In 1415, the Council of Constance endeavoured to gratify their rage against his memory, by ordering his remains to be disinterred and cast upon a dunghill. This disgraceful sentence was carried into effect; for the bones of Wycliffe being taken up were burned, and the ashes thrown into the Swift. 'Thus,' as Fuller has ingeniously expressed it, 'this brook (the Swift) has conveyed his ashes into Avon, Avon into Severn, Severn into the narrow seas, they into the main ocean: and thus the ashes of Wycliffe are the emblem of his doctrine, which now is dispersed all the world over.'

Lutterworth has 3 places of worship for dissenters, 4 Sunday schools, an endowed free school, and 3 smaller subscription schools. Its chief manufacture is that of coarse hosiery, but it is not extensive. It has a considerable trade in farm and dairy produce, chiefly carried on at its 7 annual fairs. Markets on Thursday: fairs, Thursday after Feb. 19, March 10, April 15, July 23, and Oct. 10; also on Holy Thursday.

LUTZEN, a town of the Prussian states, prov. Saxony, circ. Merseburg, 12 m. SW. Leipsic, near the railway from Leipsic to Frankfort-on-the-Maine. Pop. 2,714 in 1861. The town is celebrated for having been the scene of two of the most memorable conflicts of modern times. The first, which occurred on the 16th of November, 1632, took place between the Imperialists, under Wallenstein, and the Swedes, under their heroic monarch, Gustavus Adolphus. The latter were victorious, but the victory was dearly purchased by the death of their king, who fell in the action. Besides their king, the Swedes lost about 3,000 men; but the loss of the Imperialists amounted to double that number, and their artillery fell into the hands of the conquerors.

The other great conflict took place nearly on the same ground on the 2d of May, 1813, between the French, under Napoleon, and the allied army, under the Emperor Alexander and the King of Prussia. The struggle was most obstinate and bloody; but in the end victory declared in favour of the French. The allies lost 20,000 men, killed

Digitized by Google

and wounded; but the loss of the French was also very severe.

LUXEMBURG (GRAND DUCHY and PROVINCE OF), a territory of W. Europe, between lat. 49° 25′ and 50° 28′ N., and long. 5° and 6° 30′ E.; having N. the Belgian prov. of Liege, W. that of Namur, E. Rhenish Prussia, and S. France. Greatest length and breadth about 65 m. each. Area 2,700 sq. m. Pop. 413,831 in 1861. By the treaty of the 19th April, 1839, the territory was partitioned between Holland and Belgium; the E. portion, with an area of about 1,000 sq. m., and a pop. of 186,500, being assigned to the former, and the W. portion, with an area of 1,695 sq. m., and a pop. of 187,978 to the latter. The title of the Grand Duke of Luxemburg, with the suffrage in the councils of the German Confederation, are enjoyed by the king of the Netherlands.

A chain of hills, branching from the Ardennes, traverses the country from SW. to NE. It no where rises to more than 2,000 ft. above the sea; but it forms the dividing line between the basins of the Meuse and the Moselle. The last-named river and the Sur form the E. boundary of the grand duchy; the other principal streams are the Ourte, Our, Alzette, and Semoy, tributaries of either the Meuse or the Moselle. The valleys are fertile, but the rest of the country has mostly a stony and barren soil; and, in some parts, especially about the centre of Belgian Luxemburg, a good deal of the surface is occupied with marshes, heaths, and poor waste land. The entire surface is estimated at 690,000 *bonniers* (a measure nearly answering to hectares), of which about 240,000 are supposed to be in tillage, 211,000 in woods, 127,000 in heaths and wastes, and 112,000 altogether unproductive, or occupied by roads and rivers. It is mostly divided into small properties. Rye, barley, oats, and wheat are the principal corn crops; and potatoes, with flax, hemp, and beet-root, are raised. The agricultural course almost invariably occupies 3 years; the first year, wheat, maslin, or rye is sown; in the second oats, barley, or potatoes; and in the third, the land is left fallow. The vine is grown on the banks of the Moselle. The chief branch of rural industry is, however, the rearing of cattle for exportation. The sheep yield indifferent wool, but their flesh is excellent. Horses are good. A great many hogs are reared, and exported to France. The meadow-lands, especially in the valleys of the Alzette, Chiers, and Semois, are carefully irrigated and manured. The woods are an important source of wealth, the annual produce of timber and fire-wood being estimated at 1,100,000 *steres*. Nearly 93,000 hectares of woods belong to communes, there being scarcely a commune without a certain portion of forest land. There are few countries in which iron is more abundant, and about 9,200,000 kilog. of metal are produced annually. The slate of Luxemburg is of a superior quality. Viel-Salm, in the N. of Belgian Luxemburg, furnishes about 4 millions of slates a year; and in the S., the quarries of Herbenmont and Geripont produce about 10 millions a year, mostly exported to the neighbouring countries. Slate-pencils, marble, and a little lead, zinc, copper, and manganese are the other chief mineral products. Next to forges and potteries, woollen cloth, lace, leather, and glue factories, distilleries, and breweries, are the most numerous manufacturing establishments. The commerce of Luxemburg, however, except in iron, slate, and cattle, is insignificant. The inhabs., partly of Saxon extraction and partly Walloons, are all R. Catholics. The whole territory is subdivided into 3 districts; those of Luxemburg, Diekirch, and Grevenmacher; each has in it a tribunal of original jurisdiction; and the first, which is identical with the Dutch prov., is placed under a Prussian military governor and a Dutch civil commissary. Belgian Luxemburg is governed in the same way as the other Belgian provs. Dutch Luxemburg has the 11th place in the German Confederation, with 3 votes in the full council, and one in the committee. It has, since 1839, furnished a contingent of 1,850 men to the army of the confederation; the contingent previously to the division of the duchy having been 2,556 men.

The territory of Luxemburg was governed by its own counts from the time of the Carlovingian Frankish kings to 1354, when the Emperor Charles IV. erected it into a duchy. It was taken by the French in 1794, and subdivided among the dépts. of Forets, Ardennes, Sambre-et-Meuse, and Ourthe; but, in 1814, it was erected into a grand duchy, and given to the king of Holland, in exchange for the renunciation of his claims upon Nassau.

LUXEMBURG (Germ. *Lutzelburg*), a town belonging to the kingdom of the Netherlands, the cap. of the above grand duchy, and one of the strongest fortresses of Europe; on the Alzette, a tributary of the Sur, 22 m. SW. Treves, and 77 m. SSE. Liege, at the junction of the railways from Treves to Brussels, and from Liege to Metz. Pop. 12,195 in 1861, excl. of garrison. The town is built partly on a steep, rocky height, and partly in the valley beneath; being, consequently, divided into the upper and lower towns, which communicate by flights of steps, and streets running zigzag, so as to be passable for carriages. Both towns are fortified; and the works, which are partly excavated in the solid rock, have been greatly strengthened by the successive possessors of the town—Spaniards, Austrians, French, and Dutch. Great improvements have in recent years been made in them; and, since 1837, a new fort has been constructed outside the Treves gate. The casemates of that part of the fortifications called *Le Bonc*, resemble those of Gibraltar, and are capable of accommodating 4,000 men. Luxemburg is tolerably well built, but has no remarkable public buildings. It has some iron forges, and manufactures of linen fabrics, leather, and tobacco. The fortress is garrisoned by about 3,000 Prussian troops.

LUXEUIL (an. *Luxovium*), a town of France, dép. Haute-Saône, cap. cant., on the Breuchin, 15 m. NE. Vesoul. Pop. 3,855 in 1861. The town is well built and clean, and has a good town-hall, a large hospital, a communal college, and manufactures of hats, leather, tin and iron goods; but it is chiefly remarkable for its hot or thermal springs, which are annually frequented by from 500 to 600 visitors. The hot baths of *Luxovium* were known to the Romans, who decorated them with fine buildings. The traces of several Roman roads, aqueducts, and edifices, with various statues and medals, have been discovered in and round the town.

LUZON, the largest and most N. of the Philippine Islands, which see.

LYME-REGIS, a parl. and mun. bor., market town, sea-port, and par. of England, co. Dorset, in Bridport div. of lib. Loders and Bothenhampton, 20½ m. SSE. Taunton, 132 m. WSW. London by road, and 138 by London and South Western railway *viâ* Axminster. Pop. of munic. bor. 2,318, and of parl. bor. 3,215 in 1861. Lyme is a small and irregularly built town, situated among hills, which render it difficult of access. It is frequented in the summer as a watering-place, and many respectable families are settled in the neighbour-

Digitized by Google

hood. The pier or cobb (originally erected in the reign of Edward III., and greatly lengthened in 1826, at the expense of government) is 689 ft. long and 12 ft. broad, furnishing good shelter for shipping between Start Point and the Isle of Portland; and close to the pier is the custom-house. The regular trade of the place, however, is small. There belonged to the port, on the 1st of January, 1864, five sailing vessels under 50, and 13 above fifty tons. The gross customs revenue amounted to but 503*l.* in 1863; while in 1846 it was 2,142*l.*, and, at the close of the last century, is said to have amounted to about 16,000*l.* a year. This change is ascribed partly to the decay of its once considerable Newfoundland fishery and Mediterranean trade, and partly also to the separation of Bridport, united with Lyme till 1833. An old church, three places of worship for dissenters, a house used for assemblies, and an old town-hall, are the chief public buildings. Two schools for poor children are supported by subscription, and there are almshouses and other charities for the sick and aged.

The bor. of Lyme is undoubtedly very ancient, and claims to be one by prescription. Its first charter is dated 12 Edward I.; and its early consequence as a port is shown by the fact, that in the war with France under Edward III. it furnished four ships to serve at the siege of Calais. The mun. bor. is now governed by a mayor, 3 other aldermen, and 12 councillors, but has no commission of the peace. Corporation revenue, 250*l.* in 1862. The bor. sent 2 mems. to the H. of C. from the reign of Edward I. down to the passing of the Reform Act, which deprived it of *one* mem.: previously to that act the right of election was vested in the cap. burgesses and freemen. The Boundary Act enlarged its limits, so as to include the entire pars. of Lyme and Charmouth. Reg. electors 251 in 1865. Markets on Friday; large cattle fairs, Feb. 13 and Oct. 2.

LYMINGTON, a parl. and mun. bor., sea-port, and market town of England, co. Hants, in the E. division of the New Forest, close to the mouth of a river of its own name, which falls into the Solent, 23 m. SSW. Winchester, 93 m. WSW. London by road, and 99 m. by London and South Western railway. Pop. of mun bor. 2,621, and of parl. bor. 5,179 in 1861. The town, situated on the W. bank of the river, is well paved and lighted with gas, and consists of one well-built and wide street, crossed by two others of inferior description. On the E. bank is the village of Undershore, comprising several villas and houses of a superior kind, inhabited by persons of fortune; it is connected with the town by a bridge, and forms a suburb of Lymington. Among the public buildings are a town-hall, a theatre, assembly rooms, literary institution, and a custom-house. The port, though sufficient for vessels of 300 tons, and provided with wharfs and storehouses, is subordinate to that of Southampton. The church is an irregular building of brick and stone, the living a curacy dependent on the vicarage of Boldre. There are likewise places of worship for Wesleyan Methodists and other dissenters. A free school for both sexes, a girls' national school, and an infant school, provide instruction for the children of the poor, and there are several minor charities.

Lymington is a bor. by prescription, its corporate officers since the Municipal Reform Act being a mayor, 3 other aldermen, and 12 councillors; but it has no commission of the peace. Corporation revenues chiefly from quay and river dues 250*l.* in 1862.

Lymington has sent 2 mems. to the H. of C. since the 27th of Elizabeth, the right of election being vested, till the Reform Act, in the resident burgesses, of whom there were only 38 in 1831. The Boundary Act enlarged the limits of the bor., so as to include the entire par. of Lymington with a part of the par. of Boldre. Registered electors 328 in 1865. Lymington is also a polling place for the S. division of Hampshire. Markets on Saturday; large fairs for cheese, bacon, and cattle, May 12 and Oct. 2.

LYNCHBURG, a town of the U. States, cap. Campbell co., in Virginia, on James River, here crossed by two bridges, about 20 m. below its great falls, and 90 m. WSW. Richmond. Pop. 10,370 in 1860. The town is mostly on the declivity of a hill, and has a court-house, a gaol, a market-house, several churches, a Friends' meeting-house, a Lancastrian and other schools. A large proportion of the houses are of 2, 3, and 4 stories. Lynchburg is one of the most flourishing commercial towns in the state, as, from its situation, it commands an extensive trade not only with the W. part of Virginia, but with N. Carolina, Tennessee, Kentucky, and Ohio. It is one of the largest marts for tobacco in the Union, from 16,000 to 20,000 hhds. having been inspected in it annually for the last 10 years. It has many tobacco factories and warehouses for dry goods; and manufactures of cotton and woollen goods are carried on, and there are extensive flour-mills in its vicinity. The chief articles brought to its markets are tobacco, wheat, flour, hemp, butter, peach and apple spirits, whisky, cider, beef, live hogs, lead, and iron, a considerable proportion of which is sent down the river to Richmond for exportation.

LYNN-REGIS, or KING'S LYNN, a parl. and mun. bor., sea-port and market town of England, co. Norfolk, locally situated in hund. Freebridge-Lynn, at the mouth and on the E. bank of the Ouse, 38 m. W. by N. Norwich, 90 m. N. by E. London by road, and 99 m. by Great Eastern railway. Pop. 16,170 in 1861. The town, about 1 m. in length, by ½ m. in breadth, comprising two principal with other smaller streets, is, generally speaking, well-built, and contains many excellent houses, and extensive premises calculated for trade. It is well paved, lighted with gas, supplied with good water, and very clean. The public walks, also, in the E. part of the town deserve notice, for their extent, and the neatness with which they are kept. Lynn was formerly encompassed on the land-side by a wall and deep wet ditch, defended by 9 bastions: it is also divided into several parts by 4 small streams here called *fleets* (from the Dutch *vliet*), over which are 11 bridges. The market-place, called by way of distinction the Tuesday's market-place, is an area of 3 acres, situated at the N. end of the town, having a sculptured stone cross in its centre, and surrounded by good houses. A smaller market is held on Saturday in an open space near St. Margaret's church, and outside the town is a cattle-market. The custom-house, built in 1683, and intended for a merchants' exchange, is a handsome building of freestone, with an ornamental front, and a statue of Charles II.: the guildhall is an old-fashioned building of stone and flint, with suitable apartments for the transacting of municipal business; and near it is the borough gaol, a respectable stone structure. A new theatre has supplied the place of an older one, now converted into warehouses. The parl. bor. comprises 2 pars., that of the St. Margaret's (the living of which is a perpetual curacy in the gift of the dean and chapter of Norwich), and that of All Saints (a vicarage in the patronage of the bishop of Ely). St. Margaret's church in N. Lynn, built in the 12th century, is one of the largest par.

Digitized by Google

churches in England, and had formerly a lofty steeple blown down by a tempest in 1741: its W. end is still distinguished by 2 square towers of dissimilar architecture, the upper parts of which are of modern construction. St. Nicholas, a Gothic structure, with a bell-tower and light octangular spire 170 ft. high, is a chapel of ease to the above parish church. All Saints' church, in S. Lynn, is a well-built cruciform edifice, occupying the site of an old convent of White Friars; and the district church of St. John's, in St. Margaret's parish, erected in 1846, is in the early English style. The Roman Catholics have a church, built in 1844, in the decorated style, after designs by Pugin. There are also 10 chapels, belonging to Wesleyan Methodists, Independents, Baptists, Unitarians, and the Society of Friends. The grammar-school is in the patronage of the corporation: it has two or three small exhibitions in the university of Cambridge. Various charity-schools have likewise been established, which, with a well-conducted Lancastrian school, furnish instruction to numerous children of both sexes. Gaywood's hospital provides lodging, and a weekly stipend of 5*s.* to 53 poor widows: there are also 3 other well-endowed sets of almshouses, and many minor bequests, for the relief of the aged poor.

On the 1st of January, 1864, there belonged to the port 61 sailing vessels under, and 92 above 50 tons, but no steamers. In 1850, there belonged to the port 175 vessels, of the aggregate burden of 20,021 tons; besides which, upwards of 2,000 coasters, chiefly colliers. Gross customs' revenue, 15,777*l.* in 1863, against 49,613*l.* in 1846. The harbour is capacious; but the approach to it is rendered both difficult and hazardous by numerous and perpetually shifting sand-banks, occasioned by the action of the tide on the light silt and sand forming the bed of the river. The estuary of the Ouse is nearly 1,000 ft. broad, and there is accommodation in the port for about 300 merchant-ships. Spring-tides rise about 18 ft., and, during the prevalence of N. and NE. winds, are thrown in with such violence and rapidity as sometimes to damage the shipping. The harbour has also been injured since the completion of the Eau-brink cut, which has caused a great accumulation of alluvial soil along the King's staith and other quays lining the E. bank of the river; but this evil is now somewhat lessened by the erection of jetties on the opposite shore, which direct the course of the river more to the E. bank, by means whereof these deposits are scoured away.

King's Lynn (called Bishop's Lynn before Henry VIII. conferred on it its present name) received its first charter from King John, in return for valuable services done him by its inhabitants during the baronial wars. Its corporate privileges were confirmed and enlarged by several monarchs, and lastly by Charles II. The bor. is now divided into three wards, the municipal officers being a mayor and five other aldermen, with eighteen councillors. Quarter and petty sessions are held under a recorder; and it is the seat of a county-court, before which 937 plaints were entered in 1848. Corp. rev. 8,311*l.* in 1862. Lynn has sent two mems. to the H. of C. since the 6th of Edward II., the right of election down to the Reform Act being vested in freemen by birth, servitude, gift, or purchase. Registered electors, 1,176 in 1865. Lynn is also a polling place for the W. division of Norfolk. Markets principally on Tuesday, but also on Saturday. Fairs, Feb. 14 and five succeeding days; also for cheese a week after old Michaelmas, lasting two days.

LYONS (Fr. *Lyon*; an. *Lugdunum*), a large city of France, in the dep. of the Rhone, of which it is the cap., 275 m. ENE. Bordeaux, 172 m. NNW. Marseilles, 245 m. SE. Paris, and 70 m. WSW. Geneva, on the Paris-Mediterranean railway. Pop. 318,803 in 1861. The city is situated at the junction of the Rhone and the Saône, chiefly on a tongue of land or peninsula between those two rivers, the length of which is nearly 3 m. and its average breadth about 3 furlongs, though in the N. part of the city increasing to upwards of 1 m. Some extensive and important quarters, as St. Just, St. George, St. Irénée, and Vaise, included in the census return of 1861, above given, are, however, situated on the W. or right bank of the Saône, on and round the hill of Fourvières; and in the E., on the left bank of the Rhone, are the *Faubourg Guillotière* and the *Quartier des Brotteaux*. S. of the city, the handsome and regular suburb of *Perache* is extending towards the extremity of the peninsula; while on the N., beyond the fortifications, on the declivity of a hill extending from one river to the other, is the municipal commune of La Croix Rousse, comprising the suburbs of Serin and St. Clair. A tower on the hill of Fourvières, 680 ft. above the Saône, commands a landscape which combines the rich and the grand in the highest degree. At the spectator's feet is Lyons, with its two noble rivers; its bridges, squares, quays, and public edifices, the vessels that crowd the Saône, and the busy activity that pervades its streets, announcing a highly civilised, prosperous, and opulent community. Unlike Paris and many other French towns, which stand isolated, as it were, in the country, with ploughed land and meadows coming close up to the barriers, Lyons appears as the nucleus of a vast population, melting gradually by its suburbs into clusters of villages, which break up into smaller villages, hamlets, villas, and manufactories. Even at the distance of 10 m., the country is thickly dotted with buildings, some of which are seen sweetly perched on the S. and W. declivities of the hills which enclose the plain. The high and mountainous land on the W. side of the city is scarcely an exception; for, sterile as it seems, it is enlivened by country houses, villages, and manufactories. Beyond the hills which bound the plain on the NE. is seen Mount Jura; on the E. are the Alps; above which, at the distance of 100 m. from the town, Mont Blanc is distinctly seen like a white cloud or a mass of snow.

The interior of the most busy part of Lyons exhibits little regularity, and chiefly consists of narrow, winding streets, rendered dark by the extreme loftiness of the houses. These are chiefly of stone, and solidly built, but old; and several of the streets leading up steep declivities are inconvenient for carriages. The *quartier St. George* is greatly inferior in appearance to the suburbs of Croix Rousse and des Brotteaux, which, like it, are chiefly inhabited by the working classes. But the wretched aspect of some parts of the city is in some degree countervailed by the magnificence of others. Three ranges of quays, two on the Saône and one on the Rhone, interspersed with above twenty bridges, nearly all of modern construction, with the glacis and hill of Fourvières, encompass all that is situated between the two rivers, and form a noble and imposing outline. The Saône, which is far more useful to Lyons in a commercial point of view than the Rhone, is lined with numerous wharfs and landing-places; and along the Rhone, from the Faubourg St. Clair to Port Perache, a distance of several miles, is a line of elegant public and private edifices, and a public walk, planted with a double row of trees, commanding a fine prospect over the fertile plain to the E. The waters of the Rhone are rapid, cold,

Digitized by Google

and clear, and it forms in every respect a remarkable contrast to the Saône, which has a sluggish current and a muddy stream. The Rhone is very liable to sudden inundations, to prevent the devastating effects of which some extensive embankments have been raised on its left bank. Still the river, when swollen, frequently does much damage, as evinced in the autumn of 1840, and again, in 1852, when the inundations carried away some of the bridges, laid a considerable portion of Lyons, and of the surrounding country, under water, and occasioned great damage. Previously to 1840 there were ten bridges within the city, three of which crossed the Rhone. These were the *Pont de la Guillotière*, originally built in 1190, 539 yards in length by 24 ft. wide, with seventeen stone arches, but only eight over the water; the *Pont Morand*, constructed of wood in 1774, 228½ yards long by 14 wide; and between the two the *Pont Lafayette* (formerly *Charles X.*), a handsome bridge, 235 yards in length, the piers of stone, and the upper part of wood. To these there were added, in 1860, the *Pont St. Clair*, a suspension bridge, connecting the Quay St. Clair—held the finest quay in the world—with the Jardin d'Hiver, on the other side of the river; and the *Pont Napoléon*, opened in 1861. Just below the Pont Napoléon is the railway bridge of the Paris-Mediterranean line. Another fine railway bridge, called *Pont de la Mulatière*, and which carries the line from Lyons to St. Etienne, is thrown over the Saône, close to its confluence with the Rhone. The bridges over the Saône vary in length from 120 to 140 yards; the principal is the *Pont de Tilsit*, leading from the centre of the city, a stone bridge of five arches, 130 yards long by 15 wide, erected at a cost of 3,000,000 fr., or 120,000*l.* sterling.

Lyons has seventy *places* or squares, some large and regular, but, as may readily be inferred from their number, the great majority are very much the reverse. The *Place Bellecour* (formerly *Louis-le-Grand*), one of the largest and handsomest in France, and perhaps in Europe, in the very heart of the city, has two of its sides nearly 340 yards in length, the two others measuring 246 and 218 yards. One of the principal streets forms part of its N. face; its two shorter sides consist of symmetrical ranges of handsome buildings; and, on its S. side, is a fine plantation of linden trees. This square is ornamented with an equestrian bronze statue of Louis XIV., and forms, with the quays, the favourite promenade of all classes. The *Place Louis XVIII.* leads into the *Cours du Midi*, a broad and fine thoroughfare, planted with trees, which separates the city from the new town of Perache. The other principal squares are the *Places des Terreaux*, containing the town-hall and *Palais des Arts*; *des Cordeliers*, with a fluted column upwards of 60 ft. in height, supporting a colossal statue of Urania; *de Comédie*, in which is the entrance to the *Grand Théâtre*; *Sathonay*; and the *Place Louis XVI.*, in the Quartier des Brotteaux. In the N. part of the city a covered arcade has been formed, called the *Galerie de l'Argue*, nearly 500 ft. in length, and containing many good shops. Lyons is supplied with water from the Rhone, and has numerous public fountains.

The town-hall holds the first rank among the public buildings. This edifice, the finest of its kind in France, was erected between 1646 and 1655, and restored in 1863–4. It has a front nearly 160 ft. in width, flanked with a square tower and dome at either end. Its balustrade is ornamented with two large statues of Hercules and Minerva, and in the centre is a clock tower, surmounted by a cupola, which rises to the height of 157 ft. above ground. The depth of the building is 383 yards, at the end of which another handsome front faces the Place de Comédie. Its interior contains a vestibule, in which are two colossal bronze groups emblematical of the Rhone and Saône; a fine staircase, and a saloon 87 ft. long by 40 wide, which formerly contained many fine paintings, destroyed during the revolution. Of the forty or fifty churches, none is very remarkable either for size or elegance. The cathedral of St. John, on the right bank of the Saône, was begun in the seventh century, but not completed till the reign of Louis XI. It is a Gothic edifice, having at its four corners four heavy square towers, in one of which is a bell weighing 35,000 French lbs. The W. entrance is very much ornamented; the interior is characterised chiefly by simplicity. In this church is a remarkable clock, constructed at the end of the sixteenth century by a native of Basle, which formerly indicated, besides the year, month, day, hour, minute, and second, the sun's place, the phase of the moon, and the saints' day, as they occurred. This curious piece of mechanism had been suffered to fall into decay, till it was repaired—the best clockmakers having been found incapable of the task—by a simple stonemason, in 1862. The church of Ainay, erected on the site of an ancient temple dedicated to the Emperor Augustus, has four granite columns and a bas-relief, originally forming parts of that edifice. Several of the other churches date from the time of Charlemagne. There is also a Protestant church and a synagogue.

The hospitals are the largest public buildings in Lyons. The *Hotel Dieu*, the most ancient establishment of its kind in France, was founded by Childebert and his queen at the beginning of the 6th century. The present edifice consists of a continuous range of building, extending along the Rhone. It has a noble front, a fine entrance, and two domes, which, as well as the distribution and arrangements of its interior, are generally admired. This establishment receives annually 12,000 in-patients, besides affording medical aid to many persons without its walls. The *Hospice de la Charité*, also, on the banks of the Rhone, occupies little less space than the former, and is an asylum for 400 infirm persons of both sexes, besides many orphans, foundlings, and women *enceinte*. The *Hospice de l'Antiquailles*, for syphilitic and insane patients, stands on the hill of Fourvières, on the site of the Roman palace in which the emperors Claudius and Caracalla were born. The *Hospice de la Providence* has established numerous schools of instruction with the view of checking mendicity. There are about a dozen other hospitals.

The prefecture occupies a spacious building, formerly a Dominican convent; its interior is well adapted to its present purpose, and attached to it are some fine gardens. The *Palais du Commerce et de la Bourse*, the Exchange of Lyons, a fine new building, opened the 18th of August, 1860, faces the Place de la Bourse on the one side, and the Place des Cordeliers on the other. In the centre of this building is a vast hall, with eight statues, representing the four 'elements' and the four seasons. The hall of justice and the archbishop's palace present little deserving of notice. The *Palais des Arts*, formerly the Benedictine convent of St. Pierre, consists of four large piles of building, enclosing a square court: different portions of this edifice are devoted to the museums of painting, antiquities, and natural history, cabinet of medals, gallery of casts from the antique, *dépot* of machinery for the silk manufacture, the academy, and schools of drawing and natural history. The collection of paintings comprises some works

Digitized by Google

of great excellence; and that of antiquities is rich in Roman and middle age specimens of art found in and about Lyons, mosaics, and Egyptian antiquities. The public library, and library of Adamaly (so called from having been presented by a citizen of that name) are deposited in the royal college, and together comprise 100,000 vols., among which are some valuable Oriental works and old MSS. The prefecture, mint, grand theatre, theatre *des Célestins*, court of justice, archbishop's palace, new prison, and salt magazine, are among the other chief edifices. The botanic garden is situated within the city, and is a favourite place of public resort. About 1½ m. above Lyons is the beautiful *Ile Barbe* in the Saône, connected with its left bank by a handsome new suspension bridge.

Manufactures and Commerce.—Substituting silk for cotton, Lyons is in France what Manchester is in England. The position of the city is peculiarly favourable: situated at the point of junction of two large navigable rivers, and with a ready communication with the Mediterranean, on the one hand, she is at the same time the *entrepôt* of a vast extent of inland country. The districts of France which produce the largest quantities of silk are immediately adjacent, while Lyons is the natural depôt and place of transit for the silk of Italy, in its way to the great manufacturing countries. Added to which, the silk manufacture has here had, for centuries, its principal seat: the pop. have been thoroughly trained and habituated to it; so that, though frequently disturbed by political events, and once or twice nearly annihilated, it has never failed, on tranquillity being restored, to return to its former locality. The silks manufactured here are distinguished by the equality and perfection of the fabric, the brilliancy of their dyes, and by the unrivalled superiority of their patterns, and the taste displayed in the designs. This superiority has been ascribed to the School of Arts (*Institution de la Martinière*), and the liberal encouragement of this branch of science by the city authorities and the government. About 200 students are gratuitously instructed in the various branches of drawing and modelling, and there is a professor, who teaches the '*mise en carte*,' that is, the adaptation of designs to the loom. The gross produce of the Lyonese looms, in 1838, was estimated at 135,000,000 francs, being considerably more than half the estimated value of all the silk goods manufactured in France. In 1864, the produce was estimated, on official authority, at 300,000,000 francs, three-fourths of which was exported. The consumption of raw material was as follows in each of the years 1862 and 1863:—

	1862	1863
	Kilos.	Kilos
Silk, Raw	2,051,661	2,400,146
,, Thrown . . .	676,095	819,715
,, Waste (in masses) .	849,935	969,965
,, Waste (carded) .	67,904	76,313
,, Spun . . .	329,370	352,540

The estimated value of the raw material in 1863 was 180,000,000 francs.

There were about 70,000 looms engaged in the manufacture in 1863, about two-thirds of them in the city and suburbs, and the rest in the dép. du Rhône, and neighbouring departments. The total number of master weavers (*chefs d'attelier* or *maîtres-ouvriers*) in Lyons and its suburbs amounts to about 10,000; and the journeymen, or *compagnons*, number about 60,000; but the *compagnons* include the wives and children of many of the master weavers. The number of individuals employed in accessory occupations, that is, in the culture of silk, the manufacture of looms, &c., has been estimated at 70,000; so that, altogether, 140,000 persons in or about Lyons are supported, directly or indirectly, by the silk manufacture.

Silk weaving at Lyons is not generally conducted in large buildings or factories belonging to the silk merchants (*fabricans*), but, on the domestic system, in the dwellings of the master weavers, each of whom has usually from 2 to 6 or 8 looms, which, with the greater portion of their fittings, are his own property. Himself and his family keep as many of these looms at work as they can, and employ *compagnons* for the remainder. The latter are not settled in Lyons; but visit it, and stay a longer or shorter time according to the demand for their labour. Apprentices and *lanceurs* make up the remainder of the working classes. The former are usually apprenticed from the ages of 15 to 18; the latter are children from 9 to 14, who prepare bobbins, and weave fabrics demanding less nicety than others. About three-sevenths of the looms are wrought by master weavers, nearly an equal number by *compagnons*, and the remaining seventh by apprentices and children. The *fabricans*, or silk merchants, of whom there are between 500 and 600 in Lyons, supply the patterns and silk to the owners of looms, to whom is entrusted the task of producing the web in a finished state. Half the wages paid by the silk merchants go to the owner of the loom, and half to the labouring weaver. A master weaver may gain by his own labour from 2 to 3½ fr. a day; and he who has 3 looms is supposed to receive from the two at which he does not himself work, about 900 fr., or 36*l.* a year. His rental may be about 150 fr.; the cost of lodging his two journeymen 80 fr.; and there remains, besides his own labour, a surplus of 670 fr. Those weavers are, of course, the most prosperous, who, having 3 or 4 looms, employ their children to weave on them, and thus receive the whole wages paid by the manufacturer. 3 looms will clear to a family from 1,500 to 1,600 fr. (60 to 64*l.*) a year. The hours of work usually vary from 12 to 16 hours; but when the demand is brisk, they reach to 16, 18, and even 20. The weaving pop. is ill lodged, the master weavers generally having but two rooms at most, and these kept in a filthy state. But they live very well; that is, they have abundance of nourishing food, much more than the pop. of other manufacturing towns in France. Most of the journeymen are boarded by their employers at from 45 to 50 c. a day, and have about 1½ lb. of good bread, ¼ litre of wine, a dinner of soup and butchers' meat, with cheese or salad at supper. They rarely save money, and few of the *compagnons* raise themselves to become *chefs d'atteliers*. The weavers, speaking generally, are very ignorant; some years since not one-fourth part of the children in Lyons could read or write. But, according to official returns, there is less profligacy in Lyons than in many other of the French manufacturing towns. The proportion of illegitimate to the total number of births was indeed in some years as high as 1 in 3; but a good many of the connections out of which these births arise are really but little different from matrimony. The weavers, to escape the *octrois*, frequently visit the *cabarets* beyond the barriers, to drink their wine, and play billiards on Sundays and Mondays; but they are not addicted to intoxication or rioting, and it is affirmed that they are at present improving in morals, manners, and cleanliness. However, the best French authorities admit that the Lyonnese weavers are physically an inferior and degraded race, remarkably subject to scrofulous and scorbutic complaints, spinal diseases, and rheu-

Digitized by Google

matism. Nearly half the young men in Lyons liable to military service are exempted on account of weakness, deformity, or deficiency of height.

The upper and middle classes of Lyons, the latter comprising most part of the shopkeepers and many of the master weavers, are eminently comfortable, rich, and thriving. It is stated that there are three times more villas round Lyons than round Paris; and the number of private and public works erected in and near the city during the last 20 years sufficiently evince the rapid increase of wealth and enterprise.

Lyons has numerous dyeing establishments and printing offices, and manufactories of jewellery and liqueurs, but all these are insignificant compared with its chief branch of industry. It is the seat of a royal court, of tribunals of primary jurisdiction and commerce, a chamber of commerce, one of the five royal libraries of the kingdom, a university, academy, royal college, and academy of sciences; and has schools of theology, medicine, veterinary medicine, and rural economy; a royal society of agriculture; societies of medicine, jurisprudence and literature, a Protestant Bible society, deaf and dumb asylum, savings' bank, maternity, and many other charitable institutions.

The early history of Lyons is involved in much obscurity. But it appears certain, from the statement of Dion Cassius, that Munatius Plancus, about *anno* 40 B.C., settled in it fugitives from some adjoining towns. (lib. xlvi.) Augustus made Lugdunum the cap. of a prov., and being embellished and enlarged by succeeding Roman emperors, it became one of the principal cities of the Roman world. The old city was principally built on the hill of Fourvières, which, in fact, is merely a corruption of its ancient name of *Forum Vetus*. (D'Anville, Notice de la Gaule, p. 423.) Among the Roman antiquities which still exist at Lyons are the remains of four aqueducts, several cisterns, a theatre, traces of a palace, and a naumachia, recently discovered within the limits of the botanic garden.

From the 5th to the 13th century, Lyons belonged successively to the Burgundians, Saracens, Franks, its feudal archbishops, and its municipal council. In 1312 it was annexed to the crown of France; and in the same century, owing to the immigration of many merchants from Italy, it began to be distinguished by its manufactures. It suffered much during the religious wars of the 16th century, but far more from the revolutionary frenzy of 1793. Its ancient fortifications were then destroyed, but it has been since enclosed on the N. by a line of earth ramparts. Among the distinguished individuals, natives of Lyons, were, in antiquity, the emperors Claudius and Caracalla, and Sidonius Apollinaris; and, in modern times, Jussieu, the botanist; J. B. Say, the economist; Jacquard, the inventor of the loom which bears his name; and Degerando, the author of the able and elaborate work, 'Sur la Bienfaisance Publique.'

M.

MAAD (Hung. *Mada*), a town of Hungary, co. Zemplin, in the Hegyallya mountains, about 6 m. NW. Tokay. Pop. 1,261 in 1857. It is one of the places at which the Tokay wine is grown in the greatest perfection, and near it is the imperial vineyard of Theresienberg.

MAASSLUIS, or MAASLANDSLUIS, a town of S. Holland, on a branch of the Maas, 9 m. W. by N. Rotterdam, on the railway from Rotterdam to Utrecht. Pop. 3,626 in 1861. The town has manufactures of sailcloth, cordage, and leather, and some building docks; and its inhab. take an active share in the herring and cod fisheries.

MACAO, a sea-port town and settlement of the Portuguese in China, prov. Quang-tong, on a peninsula projecting from the SW. corner of the island Macao, on the W. side of the estuary formed at the mouth of the Tigre or Canton river, 84 m. S. by W. Canton; lat. 20° 11′ 30″ N., long. 113° 32′ 30″ E. The pop. was estimated, in 1862, to amount to 52,000, of whom about 40,000 were Chinese, 10,000 Portuguese and other Europeans, and 2,000 Malays.

The peninsula on which Macao stands is less than 2½ m. in its greatest length from NE. to SW., and not 1 m. in its greatest breadth. It is connected with the rest of the island by a long, low, and sandy neck, in one part 400 yards broad, but generally less. Across this isthmus a wall is erected, having in its middle a gate and a guard-house, called *Casa branca*, for Chinese soldiers; by means of which barrier, all communication between the peninsula and the rest of the island may be cut off. The Portuguese inhab. of Macao seldom pass beyond this wall. The town has a very imposing appearance from the sea. It is built chiefly on the declivities of two hills, meeting each other at a right angle, in front of a small semicircular bay forming the harbour. A handsome row of houses faces this bay, with a parade in front embanked with stone to resist the encroachments of the sea, and interrupted by granite quays with steps leading down to the water. Behind this terrace the houses are arranged in a confused manner, and the gable ends of European residences and the steeples of the churches appear curiously intermixed with Chinese houses and temples. Macao has 12 churches, one of which, that of St. Joseph, is collegiate. There are few other edifices of any note. A spacious senate-house, in the heart of the town, forms a termination to the principal street. The Portuguese governor's residence, near the landing-place, is nowise remarkable, and the contiguous English factory is a plain commodious building. The Chinese live chiefly together in the central and back parts of the town, and along the inner harbour: some of them have well furnished shops, and they principally supply Europeans with provisions. Besides the college of St. Joseph, there are in Macao a royal grammar-school and several other Portuguese schools, a female orphan asylum, and other charitable institutions. It is defended by six forts, two of which are placed on a lofty height at either end of the harbour, and it is usually garrisoned by about 400 Portuguese soldiers. At one extremity of the town is a mansion called the *Casa*; in the grounds belonging to which is the celebrated cave of Camoens, sheltered on one side by a lofty rock, and on the other by a grove of bamboos, above which a tower commanding a fine view has been erected. In this sequestered retreat Camoens is said to have composed great part of the 'Lusiad,' while holding the office of Portuguese judge at Macao. The land immediately around the town is fertile, and is appropriated to vegetable gardens and rice-grounds.

The harbour is on the W. side of the town, between it and Priests' Island, a small circular island, which formerly belonged to the Jesuits; but it has not depth enough to admit large ships, which

Digitized by Google

accordingly anchor in the roads on the other side of the peninsula, from 5 to 10 m. E. of the town. All foreign vessels coming into the roads send their boats to the custom-house, and pay a duty for all goods landed, however trifling. When a ship arrives among the islands, she is generally boarded by a pilot, who reports to the Chinese custom-house officer the nature of her cargo, and obtains a *chop* or permit allowing her to enter the Bogue or Bocca Tigris, with the understanding that she has nothing on board that is contraband. All females must, however, be landed at Macao, as the ship will not be allowed to proceed to Whampoa with them on board. The Chinese regulations do not allow any vessels, except such as belong to Portuguese or Spaniards, to trade at Macao. But the Portuguese inhab. lend their names for a trifling consideration to such foreigners as wish to be associated with them for the purpose of trading from the port; and vessels of other nations seldom experience any difficulty in obtaining the connivance of the Chinese officers to the landing or receiving of goods in the roads by means of Portuguese boats. Vessels of other nations, if in distress, and not engaged in the contraband trade, are admitted into the harbour for repair, on application to the senate. The latter is composed of the bishop, the chief justice, the military commandant, and several of the chief Portuguese inhab.; but a Chinese mandarin has nominally the supreme authority in the town.

Macao was given to the Portuguese by the Chinese emperor in 1586, in return for assistance afforded by them against pirates that had infested the coast.

MACASSAR. See CELEBES.

MACCLESFIELD, a large manufacturing town, parl. and mun. bor. of England, co. Chester, locally situated in Prestbury div., of the hund. of its own name, on the Bollin, 16 m. S. by E. Manchester, 163 m. NNW., London, by road, and 170 m. by London and North Western railway. Pop. of bor., 36,101 in 1861. The town, which is pleasantly situated on a slope near the borders of Macclesfield forest, has greatly increased in size during the last 40 years, and is now about 2 m. long by 1 m. in breadth, consisting of one principal thoroughfare on the London Road, crossed by two others leading to numerous subordinate streets. The buildings, in the more conspicuous parts of the town, are of superior construction; the streets also are well lighted, and the inhab. have plentiful supplies of good water, conveyed from springs on the adjacent hills. An open market-place, with excellent shambles and a covered corn-market, stand near the centre of the town; and the town-hall, rebuilt in 1826, is a commodious and handsome building, tastefully decorated, and containing, besides courts of justice, a large assembly and concert-room. The old church is a large structure, partly Gothic, with a handsome tower, formerly surmounted by a lofty steeple: it was originally erected by Edward I., in 1278, but has, at different times, been almost rebuilt, so that few parts of it can lay claim to any great antiquity. It affords accommodation for about 1,700 persons, and has an adjoining chapel containing several interesting monuments. Christchurch was erected, in 1775, at the private expense of Charles Roe, esq., who endowed it with 100*l.* a year; it is a regular building, with a neat tower, having, in the interior, an elegant marble monument of the founder, by Bacon. Trinity church, in Hurdsfield, a more recent erection, is beautifully situated on an eminence, and may accommodate about 900 persons. St. George's in Sutton (built in 1822) has accommodation for 1,500, and in the S. suburbs of the town is a fifth church, remarkable for its neat construction and light spire. There are also several places of worship for Wesleyan Methodists, Roman Catholics, and other dissenters. A free grammar-school, originally founded in 1502, was endowed by Edward VI. with property then producing only 25*l.*, but now estimated at 1,300*l.* a year, and rapidly increasing in value. A head and under-master give instruction in classics, elementary mathematics, history, and geography. Another school, called the 'Modern Free School,' endowed with 350*l.* a year, is furnishing instruction in those branches of knowledge best calculated to enable the scholars to carry on the trades and support the commerce of Macclesfield. A charity school, national school, and several Sunday schools, with others maintained by voluntary subscription, educate the children of the poor; and there are almshouses, various money charities, a dispensary, lying-in-charity, and provident society. A public park of sixteen acres was enclosed in 1854.

The silk manufacture of Macclesfield affords employment to the largest part of the pop.; a portion, however, are employed in cotton factories. There were, in 1861, about 70 factories, giving employment to 16,000 hands. The greater number of these are engaged in weaving silk fabrics, chiefly silk handkerchiefs and scarfs of every description, sarsenets, Persians, silk ferret, and galloon, with a few gros-de-Naples. The cotton manufacture, which was introduced about thirty years ago, is in a thriving condition, and hat-making is carried on to some extent. Numerous mechanics and makers of machinery depend indirectly on the staple trade of the town. The Bollin turns several mills, and the neighbourhood furnishes abundant supplies of excellent coal for the required steam power. Stone and slate also are quarried near the town, and form a considerable object of trade with the surrounding districts. The transit of heavy goods is facilitated by the North Western railway, as well as by the Macclesfield canal, which connects it N. and S. with the great canal lines of England.

Macclesfield, which was incorporated by a charter of Prince Edward, son of Henry III., and subsequently by various sovereigns of England, has been divided by the Mun. Reform Act into six wards, and is governed by a mayor and 11 other aldermen, with 36 councillors. Corp. revenues, 7,329*l.* in 1862. It has also a commission of the peace, with petty sessions, under a recorder. The town had no voice in the legislature till the Reform Act conferred on it the privilege of sending 2 mems. to the H. of C. Registered electors, 956 in 1865. Macclesfield is also one of the polling places for the NE. division of Cheshire. Markets on Tuesday and Saturday: cattle, wool, and cloth fairs, May 6, June 22, July 11, Oct. 6, and Nov. 11.

MACERATA, a city of Central Italy, cap. of prov. of same name, on a hill between Chieti and Potenza, 21 m. S. by W. Ancona, and 170 m. NE. Rome, on the railway from Ancona to Perugia. Pop. 19,622 in 1862. The city is well built, surrounded with walls, and entered by 6 gates. In the centre is an irregular open space ornamented with several good buildings, including the cathedral, the palace of the prefect, and the theatre. Including the cathedral, there are 7 churches, in one of which are some good paintings, 13 convents, several literary associations, and a secondary university for theology, philosophy, and medicine, founded by pope Leo XII. in 1824. The city presents nothing antique, and its most interesting feature is the fine view it commands of the Adriatic, and occasionally of the mountains of Dalmatia.

'Macerata,' says a traveller (Forsyth's Italy,

Digitized by Google

p. 320), contains a number of *palazzi*, and therefore a swarm of provincial nobility. The peasants observe an established uniformity in dress, of which orange appears the prevailing colour. So constant are the women of this class to local costume, that the female head becomes a kind of geographical index. At Macerata they adhere to the ancient mode of plaiting and coiling the hair, which they transfix with long silver wire tipt at both ends with large knobs, evidently the antique *acus crinalis* —

'Figat acus tortas sustineatque comas.'
Martial.

Macerata is a bishop's see, and the seat of a court of appeal for the provinces of Macerata, Ancona, and Ascoli. Its manufactures and commerce are insignificant. About 2 m. to the N., on the Potenza, are the remains of a theatre of considerable size, with vaults and foundations of other edifices, supposed to indicate the site of *Helvia Ricina*, colonised by Septimius Severus, and destroyed by the Goths.

MACHYNLLETH, a market town and parl. bor. of N. Wales, co. Montgomery, near the Dyfi, 30 m. W. Montgomery, and 175 m. WNW. London, on the railway from Montgomery to Aberystwith. Pop. of parl. bor., 1,645 in 1861. Machynlleth is an ancient, well-built town, superior to most in N. Wales for cleanness and respectability, the streets being remarkably broad and regular. The town-hall, a plain building, was erected by the Wynn family, in whom the manor is vested: the co. sessions are held alternately here and at Montgomery, and the magistrates sit here occasionally in petty sessions for the hundred. The church, a handsome structure, was rebuilt in 1827: the interior is conveniently fitted up, and the W. tower is embattled, and surmounted with crocketted pinnacles. There are places of worship for Independents, Calvinists, and Wesleyan Methodists, with attached Sunday schools, and a well-endowed national school furnishes instruction to poor children of both sexes. The flannel trade has long existed at Machynlleth, being chiefly carried on at farm-houses: the fabrics are sent for sale to Newtown. The town formerly possessed an excellent shipping trade, and was, in fact, the port of Montgomery; but since the canal was brought to Newtown, and facilities were opened direct between Wales and the commercial districts of England, the carrying trade is in barges, and few ships now come to Machynlleth. The bor. unites with Montgomery and others in sending 1 mem. to the H. of C. Registered electors in the entire district, 954 in 1865. Machynlleth is celebrated in the history of the principality as the place in which Owen Glendwr, in 1402, convoked a parliament, where he was inaugurated Prince of Wales.

MACON (an *Matisco*), a town of France, dép. Saône-et-Loire, of which it is the cap.; on the Saône, on the railway from Paris to Lyons. Pop. 18,006 in 1861. The town is pleasantly situated, but is generally ill built; the streets are narrow, crooked, and paved with rounded pebbles; the squares are mostly small, and destitute of ornament; and the houses, though of stone, devoid of symmetry. It was once partially fortified, but the works were never completed, and they are now laid out in public walks. A handsome quay borders the Saône, and is continuous with a planted promenade at either extremity. The ancient *hôtel de Montrevel*, now occupied by the town hall, theatre, and public library, with 9,000 vols.; the general hospital, two *hospices*, some of the churches, the prefecture, and the new prison, are the chief public buildings. Mâcon is the seat of tribunals of primary jurisdiction and commerce, a communal college, schools of mutual instruction and linear design, and of a society of agriculture, arts, and *belles lettres*; and has manufactures of coverlets, clocks and watches, copper and earthenware, pump machinery, and barrels. But Mâcon is principally dependent on its wine trade. The same chain of hills that overhang the rich vineyards of the Côte d'Or extends through the dép. of the Saône-et Loire, and the part of the dép. of the Rhone called the Beaujolais. In commerce the wines both of the Mâconnais, or district round Mâcon, and of the Beaujolais, are known by the name of Mâcon wines, from Mâcon being the emporium where they are mostly sold. They are strong and durable, and in general may be regarded as ranking next to the Beaune wines. The best growths are those of Torins, Romanèche, Chenas, and Pouilly. Many Roman antiquities have been found at Mâcon, and the ruins of its cathedral, destroyed during the revolutionary frenzy in 1793, form a very picturesque object. On the opposite bank of the Saône is the flourishing suburb of St. Laurent, the seat of a large corn-market.

MACROOM, an inland town of Ireland, co. Cork, prov. Munster, on the Sullane, 20 m. W. Cork, with which it is connected by railway. Pop. 3,283 in 1861. The town has a par. church, a R. Cath. chapel, a large school, a court-house, market-house, and a constabulary barrack. A manor-court for the recovery of debts to the extent of 2*l.* is held every three weeks. General sessions are held in Dec., and petty sessions on alternate Tuesdays. Markets on Saturday. Near the town is a large cavern, the interior of which has not been thoroughly explored.

MADAGASCAR, a large island of the Indian Ocean, off the E. coast of Africa (from which it is separated by the Mozambique Channel), between lat. 12° 2′ and 25° 40′ N., and long. 44° 20′ and 51° 30′ E. Length, 930 m.; average breadth, 300 m. Area estimated at about 234,400 sq. m. being somewhat greater than that of France. The coast is generally flat and low; but the interior is considerably diversified, and, though it is not traversed by any continuous chain, many parts, especially the E., N., and S. districts, may be called mountainous. The highest point, Ankaratra, in lat. 19° 40′ N., long. 47° 20′ E., is about 11,000 ft. above the sea. These mountains consist of granite, sienite, and quartz, covered in the lower parts with clay-slate, primitive limestone, and old red standstone: volcanic rocks occur in several places, and coal strata, abounding with iron, are widely distributed through the island. Rock-salt and nitre occur near the coast; and iron pyrites, oxide of manganese, and plumbago have been found in some districts. The rivers of Madagascar are numerous, and many of considerable size, the greater number flowing into the sea on the W. side; but most of them are choked with sand, have frequent falls and rapids, and are almost entirely unnavigable. There are likewise numerous lakes, not only in the central parts of the island, but also in the low alluvial districts near the sea, some of which are remarkable for their size and beauty. The most fertile parts are the valleys, most of which produce rice or other vegetables, or else are clothed with a rich and luxuriant verdure. The climate of Madagascar is extremely diversified, that of the coast being oppressively hot, while in the interior the temperature seldom exceeds 85° Fahr. The heat at Antananariro, the cap., fluctuates between 40° and 85°: the middle of the day in summer is often extremely sultry, but the mornings and evenings

Digitized by Google

are always pleasant. From May to October (the winter months of this island) the ground is often covered with hoar-frost, and the heat seldom exceeds 44°. At other seasons, however, the fluctuations between heat and cold are extreme and sudden, the temperature in the morning being seldom more than 40°, whereas, in the same day, the afternoon heat often exceeds 80°. The climate of Madagascar is generally considered to be prejudicial to Europeans, in consequence chiefly of the effluvia rising from stagnant lakes and swamps near the coast; but in the central parts, and especially in Ankova, the metropolitan prov. of the island, the marsh-fever does not exist. The weather on the coast is usually hot and damp or rainy; but in the interior the rains are periodical, in a great measure regulating the divisions or seasons of the year. The trade winds from the E. and SE. prevail during the greater part of the year; but the rains are often accompanied by violent gales from the NW., W., and SW. Earthquakes are occasionally felt, and the capital has more than once suffered considerable damage from such visitations.

Among the animals peculiar to Madagascar are five varieties of the monkey, foxes, wild dogs and cats, hogs, goats, and a peculiar kind of cattle and sheep similar to those of the Cape of Good Hope. Crocodiles swarm in nearly all the rivers and lakes, and are objects of great dread to the natives: serpents, also, some of large size, abound in the woods; and lizards, scorpions, and centipedes, are very numerous and troublesome. Birds also, of various kinds, are found in the forests, the principal of which are the paroquet, flamingo, falcon, kite, turtle-dove, pigeon, turkey, and different varieties of land and water fowls. The sea abounds with fish of various kinds, and oysters are numerous on the coast. The soil in many parts is prolific and highly susceptible of improvement, and the island produces numerous and highly valuable plants. The forests yield abundance of trees of varied durability and value; some used as dye-woods, others in building, with ebony, betel, mangrove, dragon-tree, bamboo, sugar-cane, locust-tree, *Urania speciosa*, caoutchouc tree, plantain, banana, zahana (*Bignonia articulata*), hibiscus, mimosa, castor-oil plant, longoza *Curcuma zedoaria*), cotton, indigo, and tobacco plants, allspice, pepper, ginger, turmeric, and rice. Various other vegetable productions have been introduced, such as the cocoa-nut, bread-fruit, yam, manioc, lemon, orange, peach, mulberry, quince, fig, and pomegranate. Several varieties of the Cape vine have been found to thrive well, the coffee-plant has been brought from the Mauritius, and the potato is largely cultivated as well as highly esteemed; but the common European *cerealia* have met with little encouragement. The Flora of the country is abundant; but the brilliant aspect usual to the gardens of tropical countries is here missed, in consequence of the rapid alternations of heavy rains and extreme drought.

The husbandry of Madagascar, pursued by a distinct class, consists, in a great measure, in the cultivation of rice, which is conducted with great care and success. Seed time is in September; at which season the grain, after being steeped in water, and subsequently kept in a warm place till it begins to sprout, is very thickly sown in a fine mould, almost covered with water artificially introduced into the fields. The water is afterwards drained off, manure is thrown over the seed, and as soon as the sprouts appear above the surface, moisture is again applied. The average produce in inferior grounds is said to be about fifty for one; but the best cultivated grounds are alleged to produce seventy and even one hundred fold, the harvest being in Jan. and Feb. Each rice field is separated from those adjoining by banks rising about six inches above the field, and affording great convenience to the labourers. Neither waggon, cart, sledge, nor beast of burden, is used in getting in the harvest, and the threshing is conducted either against a stone, or on the floor, by simply beating the ears with the hand. The secure storing of the grain, however, is an object of special attention: the Ovahs, the prevailing tribe of the island, have underground storehouses, made with extreme ingenuity; but other tribes have granaries above ground, beehive shaped, about 16 ft. high, made of thick, clay-built walls, and entered only from the top. Manioc is another great object of farming industry; it is raised from cuttings, and about 18 months elapse between the planting and harvest. The roots, usually about 10 inches in length by 3 in diameter, are prepared for use by scraping and boiling, and are sometimes made into cakes. Cotton is cultivated to a considerable extent; and the pigeon-pea (*cytisus cajan*) is raised for the purpose of rearing silk-worms. The European *cerealia* have been introduced by the missionaries; the plough and harrow have likewise been brought into use, and oxen broken in to cultivate the ground; but the natives prefer their old and imperfect methods of preparing the soil, to the adoption of readier plans and superior implements. Next to the cultivation of the soil, the working of iron is the most important occupation of the people. In some parts the iron ore is found in large quantities on or near the surface, whence it is gathered in baskets and smelted for use; but when it is dug out of the ground, numerous small pits are made about 6 ft. in depth, and no further attempt is made to explore the riches of the interior. The ore is first crushed, then broken into small pieces, and afterwards submitted to the action of a charcoal fire in a rude furnace of stone-work, built up to the height of 2 or 3 ft. without mortar, and thickly plastered with clay on the outside, the blast being obtained by means of wooden cylinders, in which a rude sort of piston is fitted to drive the air through a bamboo cane into the fire. The native forges are equally simple; the anvil, about the size of a sledge hammer, is fixed in the ground near the fire, the water-trough is close by, and the smith, when at work, squats on a piece of board while his attendants surround him, armed with large hammers, and ready to strike the metal according to his directions. The articles thus manufactured comprise spears and javelins, knives, hatchets and spades, chisels and hammers, a rude sort of plane-irons, files, pots, spoons, lamps, and nails; besides which they have been taught to make hinges, screws, and locks, as well as to draw copper and iron wire. The manufacture of swords and fire-arms was introduced by the French a few years ago, and the native goldsmiths and silversmiths evince considerable ingenuity in making rings, chains, and other gold ornaments, silver dishes, mugs, and spoons. The felling of timber employs about 1,000 men; the pit-saw has been brought into general use, and the native carpentry has been so much improved by the application of European tools, that their work is really well finished. The art of turning wood is practised by the best workmen of the capital; earthenware is made with considerable skill and taste, and many hands are employed in making rope and twine, as well as in tanning leather. The chief occupation of the people, however, next to the cultivation of rice, is the spinning and weaving of silk, cotton, and

Digitized by Google

linen fabrics; but all the processes are extremely simple, imperfect, and tedious. The art of dyeing is also practised, and several of the native dyes produce bright and durable colours.

The pop. of Madagascar consists of 4 chief political divisions, the numbers of which are estimated to be as follows:—

The Ovahs (in the central table-land)	800,000
Sakalavas (W. side of the island)	1,200,000
Betsileos (S. of the Ovahs)	1,500,000
Betanimana and Betsimasarka (on the E. coast	1,200,000
	4,700,000

The inhabs. differ materially in appearance and character, nor is there any doubt, though the people are nominally comprised in one political empire, and speak one language, that they include several distinct and peculiar nations. The distinction of colour separates the pop. into two great classes, the Ovahs, and a few other tribes, having olive complexions, handsome features, graceful persons, and lank dark hair; whereas the inhab. of the shore, and indeed the majority of the people, greatly resemble the Papuas, being short and stout, almost black, with low foreheads, broad flat faces, large eyes and mouth, and long crisped hair. There are differences also in the languages spoken by various sections of the pop., and many of their customs vary so much, as to make it clear that, however amalgamated, they are not one nation, but a combination of several distinct races. With the exception, however, of the Ovahs, they are little better than barbarians, run almost naked, despise a fixed life, are extremely superstitious, and practise most of the vices so generally prevalent among the savages of the neighbouring continent. Circumcision is universal, marriages are formed in very early life, and divorces are very common, and easily effected. The law permits polygamy, restricting the husband to 12 wives; but few have more than two, or at most three. Fidelity to the marriage engagement, however, forms no part of the female character, and modesty is a virtue almost unknown. Their houses are usually of rude construction, except in the cap. of the Ovah country, where European improvements have been partially introduced. The diet of the people consists, in great part, of rice and manioc, with smaller portions of beef and poultry, and the cookery is extremely simple.

Pedlery and hawking are favourite, though not profitable, occupations. The markets are great places of resort for all classes; and not only is there a daily general market at Tananarivo, but 4 or 5 large markets are held in different parts of the province, and well attended by a vast concourse of people from the adjoining districts. Animal and vegetable productions, native and foreign manufactures and cattle are exposed promiscuously; and in no nation are there more clever and persevering bargainers than in Madagascar. The greater part of the trade is carried on by barter. Most goods are sold by measure: rice by the bushel, meat by the *eye*, snuff by the spoon, fuel by the bundle. Rice, which may be considered the standard of value, costs about 1*s.* a bushel; 20 ducks or fowls may be purchased for a dollar, geese cost about 9*d.* each, and a fine turkey may be got for 1*s.* A bullock costs from 3 to 8 dollars, sheep average about 1*s.* 6*d.* each, and 20 good pine apples may be had for 3*d.* Labour is also extremely low, many working for mere food, and others gaining only 2*d.*, or at most 4*d.* a day. An intercourse has long been carried on with Madagascar by Arabs from Muscat, Indians from the presidency of Bombay, Europeans from the Cape of Good Hope, and Americans from Brazil and the United States. The taste of the people for foreign goods is also on the increase; and horses, saddles, and bridles, scarlet cloth, gold lace, red satin, purple, green, and yellow silk, silk handkerchiefs, sewing silk, calico and printed goods, hosiery, gloves, finger rings, watches and musical boxes, hardware, salt, and, above all, arrack and rum, are sought after in the markets of Ankova. The great obstacle to trade, however, is an entire want of roads. Owing to an idea which has long been entertained by the Hovas, that the best means of preserving their country from foreign invasion is to have no roads, none have ever been made. Travellers, as well as merchandise for the interior, have, therefore, to be conveyed over extensive tracts on men's shoulders. (Report by Mr. Consul Pakenham on the Trade of Madagascar, in 'Commercial Reports received at the Foreign Office.' London, 1865.)

Madagascar is divided into 28 provinces, all of which have their separate chiefs, but for years past the Ovahs have been reckoned the prevailing tribe, the chief of which is, in effect, the king of the island, receiving tribute from, and exercising sovereignty over, all the rest. The government is despotic, and the succession to the throne is commonly hereditary, the monarch having the right not only to appoint his immediate successor, but also to settle the line through future generations. He is the father of his kingdom, appoints every subordinate officer, enacts laws and orders their execution, decides cases and raises armies; but he often convokes assemblies of the people, for the purpose of obtaining information or advice on matters requiring mature deliberation, or in cases where the wishes of the aristocracy have to be consulted. The royal family is highly honoured, and tenacious of etiquette, and the respect due to rank. The judges, who rank next to the blood royal, hear causes, decide disputes, and are exclusively privileged to communicate between the sovereign and people. Subordinate to these are the *farantsa*, the police and tax-gatherers of the country; the *ambouin-jats*, or local magistrates; the *maroserana*, or military governors of provinces, a very powerful and important body; and the *vadintany*, or royal courtiers, who not only carry government despatches, but constitute a general patrol for the country. The king receives tithes of all produce, enjoys the monopoly of timber, and is exceedingly rich both in slaves and cattle, receiving also a considerable *ad valorem* duty from the possessors of these valuable articles. The sovereign is also high priest of the realm, and presides over the great national sacrifices. The religion of the country is a rude species of polytheistic idolatry, and the people almost without exception believe in witchcraft and the efficacy of charms. Christianity was introduced with temporary success by English and French missionaries, in 1818–1830; but is at present almost powerless, in consequence of various edicts which forbid its public profession.

Madagascar, the earliest accounts of which were given by Marco Polo, from the narrative of others, was discovered in 1506 by the Portuguese, who established a settlement close to the S. end of the island, and soon after tried, though with little success, to introduce the Rom. Cath. religion. It was at first resorted to merely as a place of refuge and provisioning station for ships; but in 1642 an attempt was made by the French to make it one of their colonies, which however proved futile, in consequence of its extreme unhealthiness; and in 1664 most of the colonists removed to the neighbouring island of Bourbon. The Jesuits

Digitized by Google

meanwhile continued to exert themselves in the establishment of Christianity; but owing to the injudicious zeal of Father Stephens, the superior of the mission in Madagascar, the natives were exasperated at the innovations of the foreigners, some of the missionaries were massacred, and the rest were glad to escape from the island. Various attempts have subsequently been made by the French to establish a permanent settlement, and since the general peace of 1815 they have formed four small colonies on the E. coast, as well as on the contiguous island of Madame St. Mary. The English missionaries were allowed to visit Madagascar in 1818–1825, with full permission to disseminate their moral and religious views; and the sovereign Radáma, a man of singular ability, even formed an alliance with Great Britain, suppressed the slave trade, established a general system of education, introduced Christianity into the heart of the country, formed a native army upon the European model, promoted the reduction of the language to grammatical form, and established a native press. He also favoured the diffusion of numerous arts and handicrafts calculated to extend the advantages of civilisation among his subjects. But whilst raising his country into the happiness that springs from civilisation, Radama himself fell a victim to its vices. He died in 1828, in consequence of his passionate addiction to intoxicating liquors, at the age of thirty-seven years. On the death of Radama one of his eleven wives, who was also his cousin, named Ranavolona, succeeded in getting herself elected to the throne, and now followed a period of darkness, retrogression, and persecution. The native Christians, of whom there were now great numbers scattered throughout the country, were hunted like wild beasts: they were put to death with all the cruel tortures which could be devised by the imagination of savages heated with the most enthusiastic zeal. The observance of Sunday was abolished. The missionaries were forbidden to teach the natives, and were shortly afterwards ordered to withdraw from the island. Queen Ranavolona, having revelled in blood for thirty-three years, died in 1861, and was succeeded by her son, Radama II. The accession of this prince caused a complete revulsion of feeling, and an entire change of policy in Madagascar; and on the very day of his accession, Radama II. proclaimed equal protection and universal toleration. However Radama II. was murdered after but a short reign, and the country underwent fresh troubles, due, to some extent, to the interference of foreign adventurers, chiefly from France. (L. B. M'Leod, Madagascar and its People. London, 1864.)

MADDALONI, a town of S. Italy, prov. Caserta, cap. canton, 14 m. NNE. Naples. Pop. 16,946 in 1862. The town has several churches and convents, a house of refuge, a royal college, and a noble aqueduct, which conveys water to the royal palace at Caserta.

MADEIRA, a great river of S. America, a tributary of the Amazon (which see).

MADEIRA, a famous island in the N. Atlantic Ocean, belonging to Portugal, Funchal, its cap., on its SE. side, being in lat. 32° 38′ N., long. 16° 54′ 26″ W.: length of Madeira, about 46 m.; breadth about 7 m. Area, estimated at above 300 sq. m. It is a mass of basaltic rock, presenting to those approaching its N. coast, numerous disjointed crags and tall isolated peaks, interspersed here and there with less elevated spots of verdure, the whole being based on enormous, dark-looking columns, rising perpendicularly several hundred ft. from the sea; which is usually so deep, even close in shore, that soundings are not found in less than 50 fathoms and upwards, except in Funchal roads, where ships anchor in from 30 to 35 fathoms. The cliffs on all sides are very lofty: the *Peña d'Ageria* (eagle's rock) on its N. coast, a black cubic-shaped mass of rock, is upwards of 1,000 ft. high; and C. Pargo, at the NW. extremity of the island, rises 4,000 ft. above the sea; but the most curious feature on the coast is the Punta S. Lorenzo, at its E. extremity, a ledge of rock 6 m. in length by 1 m. in breadth, which, though less lofty than other parts, is remarkable for its bold projection into the sea, and its fantastically-broken cliffs and peaks. The rapid declivities of the island are furrowed by deep and narrow valleys, at the bottom of which flow rills of pure spring water; and up their sides vineyards are formed by means of successive terraces, to the height of 2,300 ft. above the sea. The mountain scenery of the interior is bold and highly romantic; one part, a few miles NW. of Funchal, being called, by way of distinction, 'the Switzerland of Madeira.' Here is a deep valley, or crater, inclosed on all sides, except seaward, by a range of magnificent precipices, rising upwards of 1,000 ft. above the vale, the summits and sides of which are broken into every variety of dark beetling pinnacle, or flattened and tree-clad buttress; while far below smiles a fair region of cultivation and fruitfulness, rich in every species of vegetation, though itself rather more than 2,000 ft. above the sea level. The culminating point of the island is Pico Ruivo, rising 5,450 ft. above the sea, and covered with vegetation to its summit. Three rivers, or rather torrents, rise on its sides, and cross the island in several directions, contributing greatly to its fertility. The streams are carefully collected, and rendered more available for the purposes of agriculture, by means of artificial channels, or *levadas*, with sluices, constructed with vast labour. In 1840 was completed a great work of this kind, by which a copious stream, precipitated from the top of a cliff 1,000 feet in height, was made subservient to the purposes of irrigation.

The climate of Madeira fluctuates less than that of any country N. of the equator: its mean annual temperature having been found, in a period of 18 years, not to exceed 65 Fahr., that of the hottest months (Aug. and Sept.) being 74°, and that of the coldest (Dec. and Jan.) 63°, the glass seldom falling below 53° even in the severest weather. The heat of summer, however, is considerably higher, being increased from 10° to 15° during the prevalence of the hot and parching E. winds (the *scirocco*) that blow off the African continent. The temperature of Funchal, however, is considerably higher than that of the island in general: there dews are slight, and the rains few and far between; but, in the higher parts of the island, a cool climate is rendered more delicious by frequent dews and rains enriching vegetation, and rendering the air fresh and salubrious. This remarkable equality of climate, not only through the year, but during the days and nights, constitutes the chief recommendation of Madeira to invalids. Persons subject to chronic pulmonary complaints, unattended by any material disorganisation, have derived much benefit from a voyage to Madeira; as have others afflicted with diseases of the windpipe; and a still greater number who are the victims of dyspepsia, or other maladies of the stomach, the cure of which is hastened by the regular habits and exercise usually taken by invalid residents in the island. The efficacy of the climate, however, in cases of confirmed *tubercular* consumption has been absurdly exaggerated. It may then, indeed, lengthen life a little, but

Digitized by Google

it cannot effect a cure. During the last half century, vast numbers of invalids, of whose recovery no rational hope could be entertained, and who should have been left quietly to expire at home, have been hurried off to this island, at an expense which they could often but ill afford, for no purpose unless it were to amuse them with false hopes, or that they might occupy a place in Funchal church-yard. Invalids should not attempt the voyage before the middle of June, nor later than the end of September. Spring is a trying season, owing to the prevalence of NE. winds; and October is the first month of the rainy season of autumn.

Every part of Madeira, not encumbered with rocks, is extremely fertile; the hills are covered with luxuriant vegetation, and the most delicate flowers grow on their summits, which are constantly moistened with dew from the clouds overhanging the island. Trees and shrubs of the finest kinds are everywhere abundant, and tropical plants which have strayed from the gardens soon become naturalised to the soil. 'Here,' says a traveller (Wilde's Narrative, i. 89), 'all is sunshine: the green bananas, with their beautiful feathery tops, tell the visitor that he has bid farewell to Europe; the orange trees hold out to him their branches, laden with golden fruit. Plantations of coffee trees fill the spaces between the houses, the splendid coral tree hangs over his head, and the snowy bells of the tulip tree mingle with the scarlet hybiscus. If he wish for exercise, he has the most inviting walks, and the most tempting shades to shelter him: wide-spreading plane trees, and willows of gigantic growth, bend their slender arms over the streams that murmur from the hills. As he begins to ascend from Funchal, the beauty increases, and the sea-view opens to his sight. The roads, though steep, are well paved, and the horses trained to an easy pace. He rides through a perfect vineyard, where in many places the vines are carried on trellises over the road, and large bunches of grapes hang within his reach. Hedges of geraniums, fuschias, and heliotropes border those narrow paths, and shade him from the sun; the *Ficus indicus* clothes the cottages; the *Salvia fulgens* and Guernsey lily are sprinkled over the vineyards; and the *Camellia japonica*, with its delicate white flower and waxy leaf, adorns every quinta. Higher up grow the yam, prickly pear, dragon-tree and cedar, the aloe, agave and hydrangea, the sweet potato, and the *Phormium tenax*; and heaths and pines crown the highest summits of the island.' Thus it appears that, below the elevation of 1,200 ft., many of the most useful tropical plants, as the date, palm, guava, banana, and coffee-plant, are found, with numerous others peculiar to the warmer part of the temperate zone. Up to 2,500 ft., the fruits and grains of Europe, especially maize and corn, are raised; and nearly the whole of this district is covered with vineyards, the chestnut, which is extremely abundant, the beech, and other European trees, with the mahogany, grow up to an elevation of 3,400 ft., above which rise pines, heath, ferns, and grasses. Pasture is scanty: few cows are kept, and the products of the dairy are here expensive luxuries. Horses are little used, their place as beasts of burden being supplied by mules and asses of the Spanish breed. Goats and hogs are very numerous, and are allowed to run wild on the mountains, where also are found large quantities of rabbits. Poultry is abundant and cheap, and small birds of magnificent plumage occupy the groves. Myriads of finely variegated lizards crowd the gardens and vineyards, occasionally doing much damage to the grapes; but there are no venomous reptiles, and the inhabs. are free from that insect plague that is usually one of the drawbacks of warm countries. The honey bee is abundant, and produces fine honey. Many varieties of fish are caught on the coast, especially tunnies and eels, which are the favourite food of the inhab.

Agriculture is chiefly confined to the raising of vines. Land is usually let out in small holdings, varying from 10 to 40 or 50 acres, and the rent is estimated, on the *métayer* principle, at half the produce, according to a yearly valuation of the crops. Wheat, barley, and rye are produced; but the crops average little more than a third part of the annual consumption. The wheat is sown in Oct., and reaped in June, this crop being followed by another of beans or sweet potatoes. Rice is cultivated more as an ornamental grass than for any useful purpose; and Indian corn, which is admirably adapted to the climate, and is much used as an article of food, has till very lately been little grown.

Considerable attention has lately been devoted to the cultivation of the coffee plant, which may become of considerable importance. Fruits and vegetables are raised with little trouble, and the show in the fruit-market of Funchal, in a grove of noble palm-trees, is of extraordinary abundance. Here, besides all the ordinary fruits and garden vegetables of S. Europe, as oranges and lemons, green figs, grapes, pomegranates, water and Valencia melons, and pumpkins, are bananas and guavas, finer even than those grown in the W. Indies, custard-apples, alligator-pears (the fruit of the *Laurus Persea*), numerous tribes of cucurbitæ, the exquisitely flavoured fruit of the *Cactus triangularis*, the Cape gooseberry, sent as a preserve to Europe, and the *tchoo-tchoo*. But its wine is the great glory of Madeira. The grape is not indigenous to the island; and it is said to have received its first plants from Crete, carried thither by order of the famous Prince Henry of Portugal, under whose auspices it was settled by the Portuguese in 1421. Many other varieties of the grape have since been carried to the island, its mild climate and volcanic soil being especially suitable for their growth.

The steepness of the hill sides, on which the vines chiefly grow, and the necessity of economising valuable space, have led to the practice of raising the vine-beds on successive terraces, supported by retaining walls. The vines are trellised on bamboo and other supports for the purpose of exposing the grapes to the ripening influence of the sun, and the bunches are frequently of enormous size. The usual method of cultivation is to trench the ground from 4 to 7 ft. deep, according to the soil, and to lay a quantity of loose or stony earth at the bottom, to prevent the roots from reaching the clayey soil beneath, which would otherwise hinder their growth. The ground is watered three times, if the summer be very dry, and each time it is thoroughly saturated; but the less it is watered the better is the wine, though the quantity, of course, be diminished.

The N. side of the island, though sufficiently fertile, being the most exposed to cold winds and fogs, is not so favourable to the culture of the vine as the S., where all the finest growths are raised. The best Madeira-malmsey, or *Malvoisia*, is produced on rocky grounds exposed to the full influence of the sun's rays, the grapes being allowed to hang till they are dead ripe. The *Sercial* grape will, also, only succeed on particular spots. The wine made from it is, when new, harsh and austere, and requires to be long kept. The best Madeira wine is produced on the S. side of the island; but

Digitized by Google

it is alleged that not less than two-thirds of the wine grown even in this quarter is of secondary quality; so that in Madeira, as in all wine countries, the first growths (*premiers crus*) are both scarce and dear. The process of making the wine is very simple. The grapes are picked from the stalk, thrown into a vat, pressed, first with the feet, and afterwards with a weighted wooden lever. The proprietor of the land, and the collector of taxes for the crown, both attend at the press; the latter takes out of the tub his *tenth* of the whole *must*, the remainder being equally divided between the landowner and the tenant. Each takes with him a sufficient number of porters to carry away their respective shares, sometimes in barrels, but more frequently in goat skins, *borrachas*, to the cellars in Funchal, where the English merchants have extensive yards and vats for storing the wine, and carrying it through the different processes of fermentation and mixture. They usually advance money beforehand to the growers, to enable them to defray the expenses of cultivation.

Though naturally strong, a quantity of brandy is added to Madeira wine when racked from the vessels in which it has been fermented, and another portion is added when it is about to be exported. The demand for Madeira wine in the E. and W. Indies, where it is highly esteemed, first led to a knowledge of the improvement it derives from being carried to a warm climate; and it has long been customary for ships outward bound for India and China to touch at Madeira, and take large quantities of wine on board, which they bring home to England. But it must not be supposed that all the Madeira wine that has gone to Calcutta and Canton is necessarily better than any brought direct from the island, as much must obviously depend on the quality of the wine sent to the East. But, if due care be taken in the selection of the wine sent to India and China, it is very much improved and matured by the voyage; and it not only fetches a higher price, but is in all respects superior to the direct importations. Most of the adventitious spirit is dissipated in the course of the Indian voyage, and the full flavour of the wine is evolved.

The wines of Madeira have fallen of late years into disrepute in England. The growth of the island is very limited, not exceeding 15,000 or 18,000 pipes, of which a considerable quantity goes to the East and West Indies, and America. Hence, when Madeira was a fashionable wine in England, every sort of deception was practised with respect to it, and large quantities of spurious trash were disposed of for the genuine vintage of the island. This naturally brought the wine into discredit. In 1827, 308,295 gallons Madeira were entered for home consumption, whereas the quantity entered for home consumption in 1863 amounted to only 29,309 gallons of white and 360 gallons of red wine, and in 1864 had further sunk to 24,012 gallons of white and 324 gallons of red wine. The computed real value of the Madeira wine imported in 1864 amounted to 12,229*l*.

The commerce of Madeira is very considerable; the exports consist principally of wine. Among the minor articles of export are fruits, both fresh and preserved, dragon's blood (the gum of the *Calamus draco*), honey and wax, orchil (a white lichen used in purple-dyeing), tobacco, and provisions for ships. Its imports comprise manufactured goods, sheep, salted provisions, fish (especially herring and cod), oil, corn, and some tropical productions. The subjoined table gives—on the report of Mr. Erskine, British consul—the estimated value of imports and exports of Madeira in the years 1859–63:—

Years	Estimated Value of Imports		Estimated Value of Exports	
	In British Vessels	In Foreign Vessels	In British Vessels	In Foreign Vessels
	£	£	£	£
1859	115,710	71,493	56,660	37,836
1860	118,370	103,858	54,661	27,190
1861	95,900	83,469	62,180	25,255
1862	98,250	69,918	44,193	36,310
1863	104,450	76,375	44,110	35,893

The imports from the United Kingdom comprise cotton, woollen and linen fabrics, and haberdashery, with coal, earthenware, butter and cheese, salt meat, rice, and sugar. The Americans, chief importers next to the British, send timber, whale-oil, salt fish and meat, spermaceti candles, with other articles, in small quantities.

The government of Madeira has at its head a lieutenant-governor, whose power is so extensive that the comfort and happiness of the inhabs., especially the British, are greatly dependent on his character and acquaintance with the island. Justice is administered by a tribunal in whose favour little can be said, from which there is an appeal to the courts at Lisbon. The crown revenues are derived partly from a duty of 20 per cent. on all imports, except provisions; but the most productive source is the tithe of wine, with an additional duty per pipe on the quantity exported. A revenue is also derived from the monopoly of snuff, cards, and soap. The revenue is sufficient to defray the expenses of the civil, military, and ecclesiastical establishments; considerable sums are likewise expended in public works and roads, and frequently there remains a surplus, which is remitted to Portugal. The number of clergy, including monks and nuns, is stated to be somewhat under 300; they are partly supported by the crown revenues, the tithe on wine being originally intended for their maintenance. But the present government allowance, which they receive in lieu of it, is extremely small; so that the monks and clergy traffic in wine, or engage in other secular business, while the nuns gain a considerable income by making artificial flowers of wax and feathers, which are admired for their delicacy and beauty, and purchased by visitors and shippers at high prices.

The pop. of Madeira was ascertained by the census of Dec. 31, 1863, to amount to 110,741, while the adjoining island of Porto Santo had 1,423. The inhabitants are of a mixed race, sprung principally from Portuguese and Moors; but in Funchal many of the labouring classes show, by their English faces and complexions, that there has been a considerable intermixture with British settlers. Negro slaves, also, are still numerous, but they seldom intermarry with those of European origin. On the whole, the natives are a finer and more comely race than the Portuguese; they are of the middle size, well formed, and strongly knit, with masculine features, hair, and complexion. The women are almost universally under the standard height, and, when young, display handsome features, which, however, soon become coarse and unattractive, owing to their laborious field occupations. The men are dressed somewhat in the costume of English sailors, with large full leather boots, and a little funnel-shaped cap on their heads. This curious headgear is worn also by the women over the white muslin handkerchief, which covers the head and hangs down over the shoulders; and their gay chintz gowns and scarlet pelerines give them a light and picturesque appearance. 'It is delightful,' says the

Digitized by Google

traveller already cited, 'to see groups of these peasantry in companies of eight or ten sitting in some places under the umbrageous palms, eating their morning's meal, or completing their toilet, before entering the town, while others are hastening along, loaded with the various produce of their gardens, consisting of bunches of yellow bananas and strings of crimson pomegranates, or carrying fowl, firewood, and fish to the market of Funchal, each little party preceded by its mandolin-player, who at times accompanies the wire-strung instrument with his voice, and is joined at intervals by the hearty chorus of the whole group.' But the condition of a people is not to be learned from such holyday descriptions as this; and the truth is, that the native inhabitants of Funchal are meagre, sallow, and short-lived. 'This,' says another traveller, Sir John Barrow, 'is not to be attributed to the climate, but to the poverty of their food, which chiefly consists of pumpkins, sour wine, or pernicious spirits; to a life of drudgery and exposure to the great vicissitude of climate, by daily ascending the steep and lofty mountains in search of fuel; and, above all, to a total disregard of cleanliness.' In fact, almost all the natives of the island are infected with a species of itch, which they regard as incurable, and which is accompanied with a great degree of inflammation. Among the richer inhabs. are many Portuguese *fidalgos*; but by far the larger part are merchants and private residents belonging to almost every commercial country, especially Great Britain. These hold little intercourse with the other inhab., but live either in their town-houses at Funchal, or at their villas or *quintas* higher up the island, where they exercise the most liberal hospitality. A small tax on wine sent to England is levied by the British consul, to form a fund for charitable purposes, which is further increased by the benevolent contributions of the merchants, who also support an English episcopal church.

Funchal, the only town of Madeira requiring any special notice, is situated on the SE. side of the island, and stretches nearly a mile along the margin of the bay. It is irregular, inconvenient, and meanly built, with narrow, crooked, steep, and dirty streets, some of which, being paved with sharp-pointed pebbles, are painful to walk upon. Streamlets of water run down some of the streets from the overhanging mountains. The houses are commonly low, not often exceeding one story in height, with white outsides. Those belonging to the fidalgos or rich merchants are comparatively large and handsome, having at the top a *torrinha* or turret, commanding a view of the harbour, used for reconnoitring vessels as they arrive in the offing. The governor's castle is a large clumsy-looking Gothic structure, near the beach. The cathedral has a *parvis*, or open space, before its W. door; and beyond it is the *Terreiro da Sé*, a pleasant promenade under several parallel rows of trees, enclosed by a low wall, and overlooked by pretty houses with balconies. In one of the wings of the Franciscan convent is a chamber, the walls and ceilings of which were formerly covered with human skulls and thigh bones. The English church in the suburbs is an elegant and commodious building, literally embosomed in ever springing roses and white daturas. The convent of *Nossa Senhora do Monte*, amid groves of chesnut-trees half way up the mountain, commands a very fine view. Funchal roads labour under several disadvantages: the anchorage is in 35 or 40 fathoms; land squalls are often extremely violent; a heavy surf on the beach, especially in spring, makes a landing at all times unpleasant, and sometimes unsafe, except in the shore-boats, in managing which the natives are very skilful. From the autumnal to the vernal equinox, when strong southerly gales throw in a heavy sea, the roads are peculiarly dangerous, and many accidents have then occurred.

A few inconsiderable islands in the vicinity of Madeira are included under its government. Of these Porto Santo, 35 m. NW., is the only one that is inhabited. It has a parched barren aspect, and has but one fountain of good water. Its products comprise wine of an inferior quality, good barley, water-melons, and other fruits; but it is wholly destitute of wood. The town is insignificant, and is occasionally used as a place of exile from Madeira. The entire pop. of the island, as already stated, amounted to 1,423 on the 31st of Dec. 1863. The little islands called the Desertas, are occasionally visited by a few fishermen and smugglers, and the rest are mere rocks.

Madeira is said to have been discovered in 1344, by Macham, an Englishman, who was wrecked, and cast on its shores. But this story is very doubtful; and it seems most probable that Juan Gonzalez, who had been despatched on a voyage of discovery by Prince Henry of Portugal, and who fell in with this island in 1419, was its real discoverer. When discovered it was uninhabited, and covered with wood, and was on that account called *Madeira*, that being the Portuguese term for timber. It was settled by the Portuguese in 1421, and has since continued in their possession. Madeira was occupied by the English during the war with France, but merely in order to prevent its falling into the hands of the French, and it was restored to Portugal at the peace of 1814.

MADELEY, a market town and par. of England, co. Salop, franchise Wenlock, on the banks of the Severn, 13 m. ESE. Shrewsbury, 126 m. NW. London by road, and 149 m. by London and North Western railway. Pop. of par. 9,469 in 1861. Area of par. 2,750 acres. The town, which is of considerable antiquity, and celebrated in history as having given refuge to Charles II. after the battle of Worcester, derives its present importance from its proximity to the great coal and iron district of Coalbrookdale. The church is a handsome modern structure, the living being a vicarage in private patronage. The Rom. Caths., Wesleyan, and Primitive Methodists have also their respective places of worship, and there is a meeting-house for the Society of Friends. A national school is connected with the church, and there are four Sunday schools. The iron trade, carried on here to a considerable extent, is much facilitated by means of the Shropshire canal, which joins the Birmingham and Liverpool junction canal, and connects Madeley and the Ketley ironworks with the great manufacturing districts of Dudley, Wolverhampton, and Birmingham. About 2 m. W. of the town, and near the romantic village of Colebrookdale, is a cast-iron bridge, erected in 1780, of one arch, 100 ft. in span, 40 ft. above the river, and containing 375 tons of metal, being the first structure of the kind raised in the kingdom. This beautiful rural district, embosomed between high and well-wooded hills, has, within the last half century, been converted into one of active mining and manufacturing industry, the furnaces now at work in this vicinity being estimated to produce 60,000 tons of iron a year. At Coalport, about 2 m. from the above mentioned bridge, is a considerable manufactory of china. Markets on Friday; fairs May 29, and last Tuesday in Oct.

The neighbourhood of Madeley is remarkable for an extraordinary convulsion of the earth, that took place in 1773, when about 30 acres of land

Digitized by Google

were shifted from their site, and broken into irregular chasms, large oak trees were uprooted, and the Severn, blocked up for more than 200 yards by the displaced soil and fallen trees, was compelled to find a new channel, in which it now flows.

MADRAS (PRESIDENCY OF), an extensive division of British India, being the second in rank and the most southerly of the three presidencies. It comprises the whole of Hindostan S. of the river Krishna, the N. Circars, and Canara, extending from 8° to 20° N. lat., and from 74° to 85° E. long. It is of a triangular shape; the base of the triangle being formed by a line drawn from Ganjam, on the coast of Coromandel, to Sadasheragur, near the 15th degree of lat., on the coast of Malabar, the sides by their coasts, and the apex by Cape Comorin, at the southern extremity of India. It is consequently bounded on two of its sides, the E. and W., by the ocean, while on the third, or N., it has the dom. of the Nizam and the rajah of Berar, parts of the presids. of Bengal and Bombay, and the Portuguese territory of Goa. Its greatest length, N. to S., is about 950 m. The total area of the presidency is 140,917 sq. m., while the pop., according to an official return of the year 1862, amounted to 23,180,323. (Statistical Tables relating to the Colonial and other Possessions of the United Kingdom.)

Physical Geography.—Mountains.—The surface consists of a central table-land, surrounded on all sides by an undulating or plain country gradually diminishing in elevation as it approaches the sea. The mountain-ranges bounding the table-land on either side are the E. and W. Ghauts, which diverge from each other at the knot of mountains termed the Neilgherries, in about 11° N. lat., and from 76° 30′ to about 77° E. long. The W. Ghauts approach much nearer to the sea than the E., so that there is a much greater extent of plain country in the E. than in the W. portion of the presid. The Neilgherry Hills, which may be considered the nucleus of the mountain system in S. Hindostan, extend 34 m. E. to W. by 15 m. N. to S., having numerous peaks rising to between 5,000 and 6,000 ft., and one, Dodabettas, estimated at 8,760 ft. above the level of the sea. The W. Ghauts are more continuous and generally more elevated than the E.: the latter, even in the district of Salem, where they are highest, seldom attaining to an elevation of 6,000 ft., while the former frequently rise 2,000 ft. higher. The table-land above or between the Ghauts averages in Coorg nearly 5,000 ft. in elevation, and, in Canara, Balaghaut varies from 3,000 to 5,000 ft.; but it decreases rapidly in height as we proceed E. and N., and even in Mysore, Bangalore is only 2,807 ft., and Hurryhur only 1,831 ft. above the sea. S. of the Neilgherries is the Paulgautcherry Pass, in Coimbatoor, 16 m. in width, extending from sea to sea, and forming a complete break in the mountain-system of S. India. S. of this pass, a mountain chain, little inferior in height to the Neilgherries, stretches nearly due S. to Cape Comorin. This chain separates Cochin and Travancore, on the W., from the district of Madura and Tinnevelly, on the E. The Ghauts elsewhere form the chief line of separation between the British territories and those of the subsidiary states.

The principal rivers are the Godavery and Krishna, with their tributaries, and the Pennar, Palaur, Punnair, Cavery, Coleroon, and Vighey. These have all an E. course, and disembogue on the Coromandel coast. The Coleroon is the N. branch of the Cavery, which, having separated from the latter, opposite Trichinopoly, bounds the district of Tanjore on the N., and falls into the sea about lat. 11° 30′. The streams running W. have short courses; the longest is the Ponany, which traverses the Paulghautcherry Pass, but it is of little use for navigation, being very shallow in the dry season. There are no lakes of any importance: that of Colair, in Masulipatam, is the principal. There are numerous salt lagoons, or inlets of the sea, on the Coromandel coast, but they are of little use for navigation; and the whole of the Coromandel coast has a shelving shore, and is beat by so heavy a surf, as to be at all times difficult to reach, and, during the monsoon, it is quite unapproachable. The Malabar coast within this presidency is also very destitute of good harbours.

The Climate differs widely in the different portions of the presidency. The W. coast is exposed to all the fury of the SW. monsoon, during which the rains are excessive, and often accompanied by heavy squalls and thunder storms. On the opposite coast, the rains are, on the contrary, brought in by the NE. monsoon, a circumstance explained by the fact, that the Ghauts are elevated enough to intercept the passage of the clouds. The NE. monsoon lasts from October to March, but the monsoon rains are over in December, and much less rain falls on the Coromandel than the Malabar coast, where, as in Canara, the annual fall of rain is sometimes 114 in. The heat is much more oppressive on the E. than the W. side of S. India, owing to the greater prevalence of dry weather and parching winds. At the mouth of the Krishna, in the N. Circars, in about 16° lat., the thermometer has been known to stand at 108° Fah. at midnight. The plain country, in the E. part of the presidency, is frequently very unhealthy; but on the Malabar coast this is not the case. The country above the Ghauts, which has a mean temperature many degrees below that of the plains, is decidedly salubrious; it derives rain from both monsoons, having an equable climate, and an atmosphere usually clear, serene, and highly invigorating.

The Geology of S. India has been noticed with that of the rest of Hindostan. Sienite, granite, quartz, greenstone, mica, and hornblende are among the chief primitive rocks, in the Ghauts and Neilgherries. The upper soil on the coasts is usually sandy, and not very productive; but, in the valleys of the interior, it frequently consists of a rich alluvium or loam. The soil of the Balaghaut districts, N. of Mysore, consists principally of the red and black earth, so prevalent in the Deccan.

Natural Products.—Many portions of the soil in the table-land are highly impregnated with carbonate of soda, nitre, and other salts; iron is generally plentiful, and the iron ore of the district of Salem is extremely rich. Copper is found in Nellore, and a few other districts, and diamonds near Cuddapah. The presidency yields no other mineral products of much value. A considerable extent of surface, especially in the upper part of the country, is covered with forests, comprising teak, sandal, ebony, and other valuable timber trees. Teak grows on the E. as well as the W. Ghauts; but that of the Malabar coast is the most available, and best known in the market, a good deal being floated down to the coast by the small rivers, and sent to Bombay and elsewhere for shipbuilding. The toddy-palm (*Borassus flabelliformis*), cocoa-nut tree, the products of which form important articles of export from the W. districts, and other palms, flourish on the sandy coast lands, which supply few other useful articles. The sugar cane, areca, yam, plantain, tamarind, jack, mango, melons, and various other fruits, ginger, turmeric,

Digitized by Google

cotton, and hemp, some of which are indigenous, are pretty generally grown. Pepper is an important article of culture on the Malabar coast, and Coimbatoor is celebrated for the excellence of its tobacco. Rice, paddy, wheat, barley, maize, and all the other grains common in India, both wet and dry, are here cultivated: the first is grown chiefly on the plains of the coast; but it forms also the chief export of Coorg, though a high country, and is the great staple of Canara. The Balaghaut districts are almost wholly appropriated to dry grain cultivation.

Animals.—The elephant, tiger, chetah, bear, bison, elk, spotted deer, antelope, jackal, wild hog, and jungle sheep inhabit this as well as other parts of India: tigers, however, are not so numerous as in the countries watered by the Ganges, and other low and jungly portions of Hindostan. Ivory is a product of some consequence in Coimbatoor. Domestic animals are most numerous in the E. and S. districts; Guntoor is celebrated for its cattle; and Coimbatoor for its sheep, which are not hairy and long-legged like those of the Carnatic, but small, yielding good mutton and coarse wool, made into common sorts of clothing, and carpets; and live stock, above the Ghauts, is scarce and inferior.

Agriculture.—The land in the Madras presidency is generally much less fertile than in Bengal and many other parts of British India. Tanjore may be said to be the granary of the presidency, and produces the greatest land revenue. The widest breadth of cultivated land is met with in Rajahmundry, Tanjore, and Coimbatoor. The modes of agriculture pursued in the different provinces will be found briefly noticed in the articles which have especial reference to them. Generally, however, it may be said that agriculture is at a very low ebb; that the occupiers are for the most part miserably poor, and their implements and stock alike bad. Irrigation is extensively practised; and, wherever a sufficient supply of water (whether from rivers, tanks, or wells) can be commanded, as in the delta of Tanjore, S. Arcot, &c., the crops of rice are very heavy. The land under dry grains is generally manured; and cow dung used as fuel in this presidency being subject to a tax, it is generally used as manure. Opium is rarely or not at all grown; and indigo only in small quantities, principally in the N. districts. Coimbatoor exports annually upwards of 4,000 candies of tobacco to Malabar, Cochin, and Travancore; and large quantities to Trichinopoly and Mysore. The superiority of the tobacco grown in this province is attributed to the soil containing much saltpetre and peroxide of iron, as well as to the attention bestowed on its culture. The exhaustion of the land, from its cultivation, is, however, very great: the ground consequently requires frequent and regular manuring, and is cultivated every other year with dry grains. Tobacco costs on the spot where produced about 25 rupees per candy. Cotton is a staple product of Tinnevelly; and it and sugar are raised in various other places.

Manufactures.—The principal manufactures are those of cotton cloth; and formerly cotton fabrics and other piece goods were largely exported, especially from the N. Circars: latterly, however, the lower price and better quality of British piece goods have enabled them, to a great extent, to supersede those of India in most foreign markets; though the latter are still exported, especially from Tinnevelly, to the W. Indies and America. The natives have, however, turned their attention to the imitation of English cottons, and, in some instances, with considerable success. The muslins of Chicacole, the woollen carpets of Ellore, and the silks of Berhampore (Ganjam), are of old celebrity; but in general manufacturing industry flourishes most in the S. districts, and the cloths of Madura are highly esteemed for their fine red dye. The Malabar coast has a singular paucity of manufactures: its chief wealth arises from its large exports of rice to Arabia and Bombay, and of pepper and other spices, areca, cocoa-nuts, &c. A good deal of iron is made in Tinnevelly, and saltpetre and salt are made in various parts; but the latter are inferior to those of the Bengal presidency. Above the Ghauts the arts are in a very rude state. The state of manufactures depends in a great degree on the state of the roads, and means of communication, and in this respect the great lines of railway, recently constructed, have done much to raise industry.

Railways.—The principal railway in the presidency is the great Madras line, 515 miles long, running from the town of Madras to Beypoor, on the Malabar coast, with branches to Bangalore and the Neilgherry Hills. A second railway, 330 miles long, extends from the Arconum station, 42 miles from Madras, on the main line, by Cuddapah and Bellary to Moodgul, where it forms a junction with the 'Great Indian Peninsula' railway coming from Bombay. Finally, a third line, called the 'Great Southern of India,' connects Tanjore with Madras. The total number of passengers conveyed on the railways of the presidency in the year ending the 30th of June, 1864, amounted to 1,659,197; the receipts from passenger traffic in the same year were 129,662*l.*, and those from goods traffic 168,374*l.* The working expenses amounted to 165,265*l.*, or about 60 per cent.

Weights and Measures.—At Madras, the *maund* of 40 seers or 8 ris = 25 lbs. avoird.; the *candy* of 20 maunds = 500 lbs.; the *garee* for grain = 12·8 mds. At Trichinopoly, the *seer* for metals = 9 oz. 8½ dr. In Malabar, the *tolam* of 40 seers = 23 lbs. 3 oz.; the foot = 10·46 in. At Madras, the *mauney* = 2,400 sq. ft.; the *cawney* of 24 mauney = 1·3223 acres.

Revenue.—Subjoined is the account of the gross and net receipts of the presidency of Madras, for the financial year ending April 30, 1864:—

Revenues	Gross Receipts	Repayments: Allowances, Refunds, and Drawback	Net Receipts within the Year, after deducting Repayments
	£	£	£
Land Revenue	4,299,792	3,899	4,295,893
Forest Revenue	24,506	4,014	20,492
Abkaree	405,165	101	405,064
Tributes and Contributions from Native States	344,643	..	344,643
Total Land Revenue, &c.	5,074,106	8,014	5,066,092
Assessed Taxes	164,960	3,238	161,722
Customs	229,852	5,315	224,537
Salt	899,272	..	899,272
Stamps	238,342	3,488	234,854
Mint	111,696	..	111,696
Law and Justice, and Police	44,462	..	44,462
Marine	6,217	..	6,217
Public Works	29,654	..	29,654
Miscellaneous: Civil	61,439	5,206	56,233
Miscellaneous: Military	162,117	..	162,117
Interest	7,162	..	7,162
Total	7,029,279	25,261	7,004,018

Trade.—The following table gives the number and tonnage of British and other European vessels

Digitized by Google

entered and cleared at ports in the presidency of Madras in each of the years, ended 30th April, 1860, 1861, and 1862.

Years ended April 30	Entered		Cleared		Total	
	Vessels	Tons	Vessels	Tons	Vessels	Tons
	British.					
1860	1,479	398,834	1,777	470,877	3,256	869,711
1861	1,550	370,104	1,871	421,775	3,421	791,879
1862	1,590	416,216	1,889	472,242	3,479	888,458
	Other European.					
1860	115	49,357	154	65,135	269	114,492
1861	178	68,904	226	93,510	404	162,414
1862	117	49,242	172	75,901	289	125,143

The total value of the imports into the presidency amounted to 3,000,846*l.* in 1860; to 3,205,097*l.* in 1861; and to 3,474,519*l.* in 1862. About two-thirds of the imports consisted in merchandise and one-third in treasure. The exports were to the amount of 2,492,156*l.* in 1860; of 2,868,767*l.* in 1861; and 3,413,634 in 1862.

Government.—The civil administration is in the hands of a governor, subordinate to the governor-general of India. He is assisted by a council of 3 members, one being the commander-in-chief, and 3 secretaries, placed over the revenue and judicial, political, and military departments. In each of the 20 districts there is a European collector, who exerts also the chief magisterial power. Zillah courts are holden in the principal towns of most of the districts; and there are four provincial courts of appeal at Chittoor, Masulipatam Trichinopoly, and Tellicherry. In Madras is a court of Sudder and Foudjarry Adawlut, an admiralty court, and the high court of judicature for the presidency. The Church of England ecclesiastical establishment consists of the bishop and archdeacon of Madras and 19 chaplains, in different parts of the presidency. There are numerous Protestant-dissenting and R. Cath. chapels, Madras being the see also of a Rom. Cath. bishop.

History.—In the art. India, British, will be found a table, showing the dates of the successive augmentations to the British possessions in the East. The city of Madras, with a territory 5 m. along shore by 1 m. inland, granted in 1639, formed the first nucleus of the Eastern Empire. The Jaghire, or Chingleput, was obtained by the E. I. Comp. from the nabob of Arcot, in 1750 and 1763. In 1792, Malabar, Canara, Coimbatoor, Dindigul, Salem, and the Barramahl, were acquired by conquest from the sultans of Mysore; in 1800, the Balaghaut districts were ceded; and, in 1801, the remainder of the nabob of Arcot's territories were added. The siege and defence of Arcot, the capital of the nabob's dominions in the Carnatic, are among the most interesting events in the history of British India. They were undertaken, in the year 1750, by Lord Clive, who, with a force of about 500 English and native troops, successfully resisted 10,000 natives under Rajah Sahib, assisted by 150 of Dupleix's veterans. This heroic defence of Arcot is only paralleled by that of Lucknow in more modern times.

Madras, a marit. city of Southern India, cap. of the above presidency, in the distr. of the same name, on the Coromandel coast, 650 m. (direct distance) SE. Bombay, 870 m. SW. Calcutta by road, and 707 m. by sea. Pop. estimated at 720,000 in 1862. The city is not well situated, and difficult of access from the sea. There being no indentation on the coast, nor any island to break off the surge, a heavy swell rolls in throughout the year. Vessels anchor in the open roads, the large ones keeping a mile or two from shore. The danger is so great during the SW. monsoon that vessels are not allowed to lie here for several months, and the anchorage seems deserted. Cargoes are loaded and unloaded by boats adapted for passing through the surf: these, called *catamarans*, consist of three flattened timbers, 8 or 10 ft. long, tied together horizontally, and sharpened a little at the point. One or two men propel it with a paddle, flatted at both ends, and dip first on one side and then on the other. When no boat could live five minutes, these catamarans go about in perfect safety. The men are often washed off, but instantly leap on again without alarm. A waterproof cap, for the carriage of letters to and from newly arrived vessels, is almost their only article of dress. The boats used are large and deep, made without ribs or timbers, of thin wide planks, warped by fire to a proper shape, and fastened together by strong twine. Against the seams straw and mud are fastened strongly by the twine, which ties the planks together. No nails are used, for none would keep a boat together with such thumping. The boatmen display energy and skill scarcely to be surpassed. Keeping time to a rude tune, they now take long, and now short pulls, as the waves run past; they at length push the boat forward on a foaming surf, until it is thrown upon the beach.

Madras presents, from the sea, nothing to create great expectations. Only a few public buildings are visible, and not much of the town, as the site is quite level. It is, however, a noble city, and has many fine streets. Fort St. George may be considered the great nucleus and centre of Madras. It is neither so large nor so regular as Fort William, at Calcutta; but it is strong, and has the advantages of requiring a smaller garrison, and of being easily relieved by sea. It occupies a semicircular area, rather more than ¼ m. in length, by from 2 to 3 furlongs in width, in a commanding situation, immediately on the beach; and is surrounded by an esplanade traversed by roads and shaded public walks. Within it were formerly, besides many public offices, some streets of private European dwellings, shops, and stores; but these have been mostly cleared away, and the Fort now contains only the barracks, arsenal, a bazaar for the supply of the garrison, the council-house, the old church, the exchange, on which a light-house with a lantern 90 ft. high is erected. The merchants and tradesmen have mostly removed their establishments to the new streets, opened in the NE. quarter of the Black Town, and along the skirts of the esplanade. The Black, or native town, which is N. and NE. the fort and esplanade, is well laid out, and is defended by a substantial brick wall. The houses are far better, at an average, than those of the natives in Calcutta. A fine range of public edifices, including the custom-house, office for the board of trade, court-house, granary, and many store-houses, form its frontage towards the beach, protected from the fury of the surf by a breakwater of massy stones. The front of this terrace, and the drives on the esplanade, form the chief promenades of the inhabitants.

Madras differs from Calcutta, in having properly no European town, except the few houses within the fort. Most of the European settlers reside in suburban houses, and repair in the morning to their offices in the Black Town, returning in the afternoon. Their residences are chiefly on the Choultry plain, a large extent of surface, SW. of the fort, and separated from it by the river Triplicane, which, in the neighbourhood of the city, is crossed by numerous bridges. The houses

Digitized by Google

all stand in large plots of ground, shaded by trees, and divided by hedges of bamboo or prickly pear. Few are of more than one story, but they are in a pleasing style of architecture, having their porticoes and verandahs supported by stuccoed pillars. In general, the rooms are not quite so large as those of the houses in either Calcutta or Bombay, but they are more elegant and agreeable. On the Choultry plain, near Fort St. George, is the governor's residence, a large building, with a spacious banqueting-hall. Near it are the Chepauk Gardens, in which is the residence of the Nabob of the Carnatic; and, adjacent to these, is a mosque of greystone, with 5 arches in front, and 2 handsome minarets, the only Mohammedan structure of any note at Madras. The descendants of the former Portuguese inhabitants chiefly reside at San Thomé, a suburb on the shore, about 3 m. S. from the fort, with a small cathedral, and 2 neat chapels under the charge of a Portuguese bishop, and a few priests from Goa. The Protestant places of worship are St. George's cathedral on the Choultry plain, 5 other episcopal churches and chapels, a Scotch and an Armenian church, and Independent, Wesleyan, and Unitarian chapels. There are also 3 Rom. Cath. churches. The number of native Christians is stated to be very small, though increasing. There are male and female orphan asylums, many schools, and other charitable institutions, and numerous missionary establishments, both European and American.

Madras is the seat of all the chief government offices for its presidency, of the supreme court, a board of revenue, marine board, and other establishments. In consequence of its unfortunate maritime position, it has less foreign trade than the capitals of either of the other presidencies. Its commerce is still, however, considerable, as it is the principal emporium of the Coromandel coast, and trades direct with Great Britain, and other European countries, the United States, the South American States, China, the Eastern Islands, the Birman Empire, Calcutta, and Ceylon. The principal articles of import are rice and other grain, chiefly from Bengal; cotton piece-goods, iron, copper, spelter, and other British manufactures; raw silk from Bengal and China, with betel or areca nut, gold dust, tin, and pepper, from the Malay countries; and rice and pepper from the coast of Malabar, with teak timber from Pegu. The exports consist of plain and printed cottons, cotton-wool, indigo, salt, Ceylon pearls, chank shells, tobacco, soap, natron, some dyeing drugs, and coffee, from the table-land of Mysore.

In Madras roads, large ships moor in from 7 to 9 fathoms, with the flagstaff of the fort bearing WNW. 2 m. from shore. From Oct. to Jan. is generally considered the most unsafe season of the year, in consequence of the prevalence of storms and typhoons. On the 15th of Oct. the flagstaff is struck, and not erected again till the 15th of Dec., during which period a ship coming into the roads, or, indeed, any where within soundings on the coast of Coromandel, vitiates her insurance. The light within the fort may be seen from the deck of a large ship at 17 m. distance, or from the mast-head, at a distance of 26 m. By the port regulations, no articles are to be shipped or landed without a permit, or after 6 P.M. Any merchandise attempted to be landed without the prescribed forms, or that is not entered in the manifest, is liable to double duty; and, where a fraudulent intention shall appear, to confiscation.

Meat, poultry, fish, and other provisions are to be procured for shipping at Madras, but they are neither so good nor so cheap as in Bengal. Wood and fuel are rather scarce, and dear in proportion. Water is of very good quality. On account of the dearness of provisions, wages are considerably higher than at Calcutta, and comparatively few servants are kept. The style of living is much the same in Madras as at Calcutta, but visiting is not carried on upon so extensive a scale. In the cool season assemblies are held in the Pantheon, a building erected in the suburb of Vepery, and occasional balls take place throughout the year. During the cool season, also, races are held at St. Thomas's Mount, about 7 m. from Madras. The road to the racecourse is one of the finest in India, and shaded by trees through its whole length. At the foot of Mount St. Thomas is the principal cantonment for the artillery of the Madras army, with a noble parade ground, considered one of the best military stations in S. India.

Madras experiences less extreme heat than Calcutta, taking the average of the year, though so much nearer the equator. The *minimum* temp. in Jan. 1837, was 65° Fah.; the *maximum* in May of the same year, 99°: the mean annual temp. was 81·7°. Several extensive tanks and some swamps surround the city and its territory; but Madras is not said to be particularly unhealthy.

The territory on which Madras is situated formed the first acquisition made on the continent of India by the British, who obtained it by a grant from the rajah of Bijnagur in 1639, with permission to erect a fort thereon. The latter, which was forthwith built, was besieged in 1702 by one of Aurungzebe's generals; and in 1744 by the French under M. de la Bourdonnais, to whom it surrendered after a bombardment of three days. It was restored to the English at the peace of Aix la Chapelle, and sustained, with credit and success, a memorable siege by the French under Lally in 1758–9, since which it has experienced no hostile attack.

MADRID, a celebrated city, and the modern cap. of Spain, on the Manzanares, a tributary of the Tagus, 39 m. N. by E. Toledo, 320 m. ENE. Lisbon, and 240 m. SW. Bayonne, at the centre of the chief lines of railway which traverse the kingdom. Pop. 281,170 in 1857, of whom 136,012 males, and 136,145 females. The city—which till the time of Philip II. was little more than an obscure country town—stands in a stony barren district, more than 2,000 ft. above the sea, having no navigable river near it, and extremely cold in winter and unbearably hot in summer; the thermometer, at the former season, falling to 18°, and, during the latter, rising to 110° or 115° Fahrenheit. The variableness of temperature, combined with the prevalence of piercing E. and NE. winds, during the greater part of the year, renders the climate very unhealthy, and especially prejudicial to persons threatened with pulmonary complaints. All authors, indeed, agree that it would have been difficult to fix on a more unfavourable site. 'From the Somo-Sierra,' says a traveller, 'to the gates of Madrid, a distance of nearly 30 m., not a tree, garden, nor country house is to be seen, scarcely an isolated farm-house or cottage, and only three or four very inconsiderable villages. The land is chiefly uncultivated, and even that part under tillage and producing grain is mostly covered with weeds and stones. In the midst of this desert stands Madrid, which is not visible more than two leagues' distance. From this side it appears small and not striking; and although we may count upwards of 50 spires and towers, none are so elevated or imposing as to awaken curiosity, like that felt on first discovering the towers of churches in other Spanish cities. Even ½ m. from the gate, the traveller might still believe himself to be 100 m. from any habitation: the road stretches away,

Digitized by Google

speckled only by a few mules; there are no carriages, no horsemen, scarcely even a pedestrian; there is, in fact, not one sign of vicinity to a great city.'

Madrid occupies a space of nearly 4 sq. m., on a slope inclining SSW. towards the Manzanares, usually an insignificant stream crossed by two magnificent bridges, the size and beauty of which contrast so strongly with the river beneath as to have given rise to the saying, that 'the kings of Spain should sell the bridges, and purchase water with the money.' The river, however, sometimes swells to a great height, and pours down a magnificent volume of water. The town is surrounded by a brick wall, in which are 15 stone gates, the handsomest being those of Alcala, San Vincente, and Toledo. The interior comprises an old and a more modern quarter, the former built before Madrid was the metropolis of Spain. The E. and more modern part is not devoid of beauty; and its wide and well-paved streets, lined with handsome and lofty houses, chiefly built with brick and grey granite, the extensive and well-planted walks, the squares with their elegant fountains, and the many large and well-built public edifices, remind the traveller that he is in one of the finest, though perhaps also one of the dullest, capitals in Europe. The best entrance to the city is by the Saragossa road, through the gate of Alcala, a noble Ionic structure, with three arches, the central one being 70 ft. high. Within the walls, right and left, is the long, wide *Prado*, with its rows of trees stretching in fine perspective for more than ½ m., and in front is the *Calle de Alcala*, reaching into the heart of the city, ¾ m. in length, of great width, and flanked by a splendid range of unequal buildings, but all of large size and good proportions. At its end is the great centre, in which most of the better streets terminate, called the *Puerta de Sol*. Here, close to the *Bolsa*, or exchange, is the great morning rendezvous, either for business or pleasure. The best streets uniting in this point are the *Calle Mayor*, the *Calle de la Montera*, and the *Calle de las Carretas*, all busy thoroughfares, with good and showy shops. The *Calle del Arsenal* leads to the palace, and the *Carrera de San Geronimo* is the direct road to the gardens of the Buen Retiro. Among the squares of Madrid, the largest, with the exception of the space fronting the palace, is the *Plaza Mayor*, a rectangular area, 430 ft. in length, and 330 ft. broad, surrounded by a uniform range of stone buildings, 5 stories high, the lower part being open in front, and supported by pillars forming a handsome colonnade. The chief streets running into it are those of Atocha and Toledo, the latter passing through the *Plaza de Cebada* (formerly the place of execution for criminals), and through the gate to the bridge of its own name. None of these streets, however, will bear any comparison with the Calle de Alcala: many are good, and very many respectable, tolerably wide, and formed with lofty and well-built houses; but there is no other magnificent street. The bye-streets are narrow and crooked, especially in the SW. quarter, where decay of material, closeness of building, and extreme filth are the almost unvarying characteristics.

Among the public buildings, the most conspicuous is the royal palace, occupying, with its gardens, a space of nearly 80 acres, on the E. bank of the river. It stands on the site of the old Alcazar of Philip II., burnt down in 1734, and has 4 fronts of white stone (each 470 ft. in length and 100 ft. high), enclosing a spacious quadrangle. The interior is fitted up in a style of costly magnificence, perhaps not surpassed in any palace of Europe. The ceilings are *chefs-d'œuvre* of Mengs, Velasquez, Corrado, and Tiepolo; the richest marbles of Spain adorn its walls, and the rooms are hung with paintings by the best masters, and noble mirrors from the manufactory of St. Ildefonso. Many of the best pictures, however, which formerly adorned the palace, have been removed to the royal picture-gallery in the Prado. But the armoury of the palace is especially curious, and presents numerous specimens of arms and acoutrements taken from the Moors by Ferdinand the Catholic and his victorious generals. The other chief public buildings are, the custom-house, a handsome range of building, 320 ft. in length; the Buena-vista palace, now used as a museum of civil engineering; and the palace of the council of Castile, in the Calle de Alcala; the post-office, in the Puerta del Sol; the national printing office, in the Calle de las Carretas; the duke of Liria's palace, containing a fine collection of pictures, near the gate of St. Bernardino, in the N. quarter of the city; the palace of the duke of Berwick; and the national gallery, in the Prado. Madrid, though a bishop's see, has no cathedral; but there are about seventy churches, among which the churches of San Isidro and the Visitation are alone worthy of notice, the rest being externally and internally barbarous. 'No mad architect,' says a modern traveller, 'ever dreamt of a distortion of members so capricious, of a twist of pillars, cornices, or pediments so wild and fantastic, but that a real sample of it may be produced in some one or other of the churches of Madrid. They are, with two or three exceptions, small and poor both in marbles and pictures. Their altars are piles of wooden ornaments heaped up to the ceiling and stuck full of wax-lights, which more than once have set fire to the whole church.' Madrid had formerly several hundred convents; but the greater number of these have been pulled down to widen the streets, while others have been converted to more useful purposes. The walks constitute a grand feature of the city. The *Prado*, or public promenade, is as fashionably attended, especially on Sunday, as Hyde Park in London. It is nearly 2 m. long, and comprises a broad walk, called the *salon*, flanked by several of less width, thickly shaded with elm trees; contiguous to it is the garden of the *Buen Retiro*, the palace of that name having been demolished; and still further S. are the shady gardens called *Las Delicias*, leading to the Canal de Manzanares, which was once intended to connect Madrid with the Tagus at Toledo. These walks, in the afternoons of autumn, are crowded with the most respectable inhab., nor can any better idea of the out-of-door appearance of the pop. be got than by observing them on the Prado. In the spring, however, the scene is varied by visits to Aranjuez, a beautiful park near the Tagus, forming a verdant oasis in the midst of a desert. Nearly all the ladies seen here wear black silk dresses and shawls, or rather mantillas, of various colours, while their head-dress consists only of a slight veil attached to the hair by a comb, and falling on the shoulder; and the graceful manner in which they wear the mantilla and veil gives to them all an attractive air. The dress of the men is in every respect similar to that of the French; but they usually cover their persons with large cloaks, which, from the manner of wearing them, have rather a graceful appearance.

The state of education in Madrid, formerly very defective, has been greatly improved within the last 20 or 30 years. The 2 principal educational establishments are the *Colegio Imperial* and the *Seminario de Nobles*, schools or colleges frequented by the better classes. The instruction given to females is, however, most superficial; reading, writing, and a little geography are taught, in con-

Digitized by Google

nection with music and other accomplishments; but few ladies attain to any thing like literary distinction, and the majority are said to be 'ignorant almost beyond belief.' Closely connected with the educational establishments are the various literary and scientific societies, most of which are under the protection of the crown. The Academy of History, which has a handsome mansion in the Plaza Mayor, was instituted in 1735, for the purpose of collecting authentic materials for the history and geography of Spain and her possessions, and has published, amongst other useful works, an historico-geographical dictionary of Spain and Navarre. The *Academia de la Lengua* has for its object the perfection of the Castilian language, and with this view has published a dictionary, grammar, and other works on Spanish philology. There are also academies of science, the fine arts, medicine, and rural economy, all of which are more or less useful in promoting their respective objects.

The public collections comprise,—1. the royal library, with 200,000 printed volumes, besides many valuable Arabic and other MSS., and a fine collection of coins; 2. the library of San Isidro, formerly belonging to the Jesuits, and containing upwards of 60,000 volumes; 3. the museum of natural history, in which, besides other good specimens, is the great *megatherium*, described by Cuvier; 4. the botanical garden and library; and, 5., the national picture-gallery, equal in extent, and perhaps little inferior in excellence, to the largest in Europe. To the lover of the Spanish school, this gallery possesses attractions which no other can offer. Besides 42 pictures of Murillo, it contains 55 of Velasquez, 29 of Espanoletto, 17 of Juanes, 6 of Alonzo Cano, and many by other native painters; there are also nearly 500 pictures of the Italian schools, and about 300 of the Flemish school; and in the *Sala Reservada* are several master-pieces of Titian and Rubens.

The theatrical amusements of Madrid are confined to two small establishments, managed by the ayuntamiento or city council. At these theatres, called the *Teatro de la Cruz* and the *Teatro del Principe*, Spanish comedy and Italian operas are indiscriminately represented: the musical department is on the whole well conducted: the plays are of the most trifling description, more resembling low farces than regular comedies; but they represent pure and unadulterated pictures of the intrigues and low life of Spain, and exhibit a truth and spirit unknown on any other stage. The great and all-absorbing amusement, however, of the people of Madrid (called by their countrymen, *Madrilenos*), is the bull-fight, held on certain Monday afternoons during the season, in a large open amphitheatre, outside the gate of Alcala. Monday in Madrid is always a kind of holyday, and in the afternoon all the avenues leading to the bull-ring are in commotion: the street of Alcala is filled throughout its whole extent with a dense crowd of all ranks, some on foot and others in carriages, all hastening to the same point. The amphitheatre will accommodate 17,000 spectators; the central area has a diameter of 230 ft., and is surrounded by a double fence, behind the exterior of which the benches rise tier above tier to the outer wall, where, at the top of all, and shaded with awnings and blinds, are the boxes occupied by persons of rank and property. The intense interest which the spectators of all classes, women as well as men, feel in this butcher-like sport, is visible throughout, and often loudly expressed. The expenses of these exhibitions are very heavy; but the receipts are greater, leaving a handsome sum for the General Hospital, which, it is said, draws from them a revenue of 300,000 reals, or 3,000*l.* sterling.

Madrid has numerous benevolent institutions for the relief of indigence and the cure of disease, many of which are supported by handsome endowments. The royal hospital of San Fernando, a very large establishment somewhat like an English workhouse, and the mendicity institution for the reception of beggars, formerly the greatest nuisance in Madrid, are doing much good; and the General Hospital not only gives relief to the sick poor, but serves as a practical school for the students of the Academy of Medicine. A *mont de piété*, like that in Paris, lends money on security, with this difference, that at Madrid *no interest* is taken, the expense of the establishment being borne by the government.

Madrid has scarcely any manufacturing industry; nor is it possible, from its situation, at a distance from any navigable river, and in the midst of a stony, unproductive desert, that it can, in this respect, materially improve, even if that love of the *dolce far niente*, which pervades all classes of the population, should be given up. As it is, the workmen of the city are Catalans, Valencians, Aragonese, Asturians, and Galicians: in short, every article in Madrid, whether of manufacturing or farming industry, is exotic. Its fruit comes from a distance of 50 m., butter from Aragon, oranges and lemons from Valencia, and dates from Murcia. A manufactory of porcelain and another of carpets are carried on at the expense of the government, most probably with little profit. The price of provisions and the general expenses of living are very high, in consequence of the necessity of bringing almost every article from a distance, and the want of water carriage. The markets are well supplied with meat, poultry, and vegetables; but fish and milk are scarce. Coffee is cheaper than in England; but tea and sugar are scarce, dear, and bad. Fruit is abundant and very cheap. Fuel is one of the most expensive articles, and lodgings fetch as high rents as those in the best situations in London.

The state of society in Madrid must be learnt from viewing the habits of the middle classes; for it is next to impossible for a stranger, even with good introductions, to know enough of the aristocracy to form a correct judgment of their domestic habits, owing, in a great measure, to the general poverty, which, with the high rate of living in Madrid, is a very effectual bar to hospitality. Almost all families, except those in the very highest ranks, live, as in Paris and Edinburgh, in stories or flats, each story being a distinct house. The outer door, which is of enormous strength, has a small window or grating, with a sliding shutter, and the usual salutation from the porter, when one rings for admittance, is *Quien es?* to which the proper reply is *Gente de paz* (people of peace); and the door, in ordinary cases, is opened. This precaution of surveying strangers before admission is, perhaps, attributable to a feeling of personal insecurity, consequent on bad government and religious persecution. A suite of apartments usually consists of a large, well lighted, and respectably furnished saloon, with a recess on one side, in which is a bed, wholly unconcealed, and without curtains; and at another side is a door-way leading into a smaller chamber, similarly furnished to that just described. The lady's boudoir is always handsomely decorated; and the worst rooms in an establishment are invariably the library, or study, and the dining-room, both of which are small and wretchedly furnished. The apartments are kept remarkably clean. The manner of living in Madrid is somewhat more gene-

Digitized by Google

rous than in the N. provinces. A rather rich soup is usually added to the everlasting *olla*, or *cochido*, which is much better made and more highly seasoned than in the rest of Spain; and dinner is always followed by cakes, sweetmeats, and fruits, accompanied by a moderate supply of Valdepenas and other good native wines. The inhabs., except the tradespeople, rise late, and breakfast on chocolate between 10 and 11. Lounging, reading, or a stroll to the cafés, occupies the men, dressing and visiting the ladies, till dinner (about three); after which follows the siesta, a season of almost universal repose in Madrid. The shops then are either shut, or a curtain is drawn before the door; the shutters of every window are closed; scarcely a respectable person is seen in the streets; the stall-keepers spread cloths over their wares, and go to sleep; groups of the poor and idle are seen stretched in the shade; and even the Gallician water-carriers, seized with the general drowsiness, make pillows of their water-casks. The siesta over, the ladies sit in the balconies, and the gentlemen smoke their cigars, till the time for the lounge on the Prado; and then comes the *tertulia*, a very pleasant and social meeting for chit-chat and music, closing the day of Madrid. Dinner parties are seldom or never given, and there are no regular *parties* except balls; and those not frequent, and unaccompanied by any refreshment beyond *agua fresca*. The best national manners are not, as in other countries, to be found in the cap., where everything is sacrificed to the rage for imitating the French and English—a feature which distinguishes the *Madrilenos* from all other Spaniards. Morals in all classes, especially the higher, are said to be in the most degraded state.

Madrid occupies the site of the ancient *Mantua Carpetanorum*, a fortified town belonging to the Carpetani. It was afterwards called Majoritum, was taken and sacked in 1109 by the Moors, who gave it its present name. Henry III. repaired and enlarged it at the beginning of the fifteenth century, and Philip II. made it the capital of Spain. Its subsequent history to the time of the French war is unimportant. On the 23rd of March the city was entered by the French troops under Murat, and the royal family was induced to remove into France. Joseph Bonaparte was then made king; but both he and the French army were, two months afterwards, obliged by the inhabs., who rose in a body, to evacuate the town. In the December following, Madrid was occupied by Napoleon in person, and his brother Joseph was reinstated. The English troops occupied it for a short time in 1812, and it was again visited, in 1823, by the French under the Duc d'Angoulême.

MADRIDEJOS, a town of Spain, in New Castile, prov. La Mancha, 39 m. NNE. Ciudad-Real, and 65 m. S. Madrid. Pop. 6,828 in 1857. The town is situated in an extensive and exposed plain, on the great road from Madrid through Aranjuez to Jaen and Granada, the neighbourhood being rendered not only unhealthy, but also, in some parts, unproductive by the inundations of the Amarguillo, which often greatly injure the town, and deprive the people of their means of support. The only public buildings are two par. churches and a hospital; nor are there more than a dozen good houses in the place. A manufactory of serge is the only branch of industry in the town; but the neighbourhood is remarkable for its rich crops of saffron and for extensive sheep-farming.

MADURA and DINDIGUL, a district of British India, presid. Madras, prov. Carnatic, near the S. extremity of Hindostan, between lat. 9° and 10° 45′ N., and long. 77° 10′ and 79° 10′ E., having N. Trichinopoly and Coimbatoor, W. Cochin and Travancore, S. Tinnevelly and the Gulf of Manaar, and E. the latter and Tanjore. Area, 7,656 sq. m. Pop. 1,756,791 in 1862. The pop. are chiefly Hindoos of the Sudra caste. The N. and W. parts of this district are mountainous, the S. and E. level. The hilly parts are interspersed with fertile valleys, the principal being that of Dindigul; but the plain country of Madura is by far the most productive portion of the surface. It is intersected by the river Vighey, which rises in this district, and, after a course eastward for about 145 m., falls into the Gulf of Manaar. A few swamps exist on the shore. The island of Ramisseram belongs to this district. The climate of the hills is cool and healthy, but the wind often blows with great violence. In the S. it is much warmer, the temp. in April and May ranging between 70° and 98° Fahr. Different kinds of paddy are grown in the low country, irrigation being there facilitated by plenty of streams and tanks: the husbandry is tolerably good, though not so perfect as in Tanjore. In Dindigul, the dry culture is to the wet as 4 to 1; and the inhab. are in much less comfortable circumstances than those of the S. Property is much subdivided: some individuals occupy only the 20th part of an acre, and few have more than 135 acres. Madura is celebrated for its piece goods and its dyers; and its artisans in gold and silver are in many places much above mediocrity. Its chief exports are piece goods, cotton, paddy, and chanks; its chief imports, betel nut, chay root, cocoa nuts, and oil seeds. This district is supposed to be the *Regia Pandionis* of Ptolemy, having been anciently governed by a Pandian family, and is one of the holy countries of Southern India. It has numerous fine temples, and other monuments of former Hindoo grandeur. It was transferred to the British by the nabob of Arcot, in 1801.

MADURA, a town of S. Hindostan, cap. of the preceding district, on the Vighey, 136 m. NNE. Cape Comorin, and 270 m. SW. Madras, on the Great Southern of India railway. Pop. estim. at 20,000. The town is surrounded by a bastioned but dilapidated stone wall; streets wide and regular, public edifices magnificent, but private dwellings mean and wretched. It has some of the most extraordinary specimens of Hindoo architecture extant. The palace is a vast pile, with a dome 90 ft. in diameter; but it is much dilapidated: the great temple, with its spacious areas, choultries, and four colossal porticoes, each a pyramid of ten stories, covers an extent of ground almost sufficient for the site of a town. In front of the latter is a celebrated choultry, or inn, 312 ft. in length, ornamented with polished green stone columns and grotesque sculptures. During the Carnatic wars, from 1740 to 1760, Madura underwent many sieges.

MADURA, an island of the Eastern Archipelago, immediately adjacent to the NE. coast of Java, with which island it is politically included, under the Dutch government. (See JAVA.)

MAESE. (See MEUSE.)

MAESTRICHT (an. *Trajectus ad Mosam*), a fortified town of Holland, prov. Limburg, of which it is the cap., on the Maese, 14 m. N. by E. Liege, and 57 m. E. Brussels, on the railway from Hasselt to Cologne. Pop. 28,080 in 1861. Maestricht is one of the strongest towns in Holland, being defended by numerous bastions and trenches: it is well built, with wide, clean, and well-paved streets. The market is held in the great square, the centre of which is occupied by the town-hall, built in 1652, and said to be one of the finest structures in the kingdom. The *place d'armes* is also a fine open space planted with rows of trees

Digitized by Google

and much frequented as a promenade. Among the other public buildings are comprised the exchange, the church of St. Servais, the arsenal, and the theatre: and in the town are 10 churches, 2 hospitals, 2 orphan asylums, a lazaretto, athenæum, fine public library, and society of agriculture. Maestricht is the residence of the governor of the prov. and the seat of a court of assizes and primary jurisdiction, as well as of a chamber of commerce. The industry of the town comprises the manufacture of woollen cloths and flannels, cotton and woollen yarn, fire-arms, pins, starch, and tobacco; besides which there are soap-factories, tanneries, breweries, and dye-houses. A considerable trade is carried on with various places on the Maese by means of barges, and steamers ply daily between Maestricht, Liege, and Namur. Three large fairs are held here during the year for horses and cattle. On the other side of the river (crossed here by a stone bridge) is the citadel or fort of Petersberg, in the suburb of Wyk, famous for its extensive subterranean stone quarry, containing numerous intricate galleries and passages, and abounding with curious marine and saurian fossils, some specimens of which may be seen in the museum of the Jardin des Plantes at Paris.

MAGDALENA, a river of S. America, and, next to the Orinoco, the principal in the republic of New Granada, through the centre of which it flows, from S. to N., through 9 deg. of latitude. It rises in the small lake of Papas, in the Andes, about lat. 2° N., and long. 76° 25′ W., and runs for at least 500 m. between the middle and E. chains of the Cordillera. Its entire course may be estimated at about 800 m.: it enters the Caribbean Sea about 65 m. NE. Cartagena, and 40 m. SW. Santa Marta. Its principal tributary, the Cauca, flows between the central and W. chains of the Cordillera, and joins it from the W., between 150 and 200 m. from its mouth. Its other affluents are the Sogamoza, Sesar, and Bogota. The towns of Nayva, Honda, and Monpox are on its banks. The descent of the Magdalena is 20 inches a mile, and the strength of its waters is such, that they preserve their freshness to a considerable distance from its mouth. The Magdalena is navigable as far as Honda, in lat. 5° 14′ N., near which the navigation is interrupted by cataracts; but its rapidity is such, that a distance of 10 leagues a day is reckoned very good progress in ascending the river, for a *champan*, or flat-bottomed boat, manned by 24 *bogas*, or rowers. The oppressive heat of the climate, the abundance of caymans, and the swarms of musquitos and other insects that infest the river, contribute to render the navigation both dangerous and unpleasant; but the Magdalena is, notwithstanding, the main route for the commercial and other intercourse of the inland prov. of New Granada with the ocean.

MAGDEBURG, a fortified city of Prussia, cap. of prov. of same name, on the Elbe, and on the railway from Brunswick to Berlin, 74 m. SW. Berlin, and 50 m. ESE. Brunswick. Pop. 67,607 in 1861, excl. of a garrison of 7,304. Magdeburg is a fortress of the first class, and, from the augmentation and improvement of its defences since the war, it is now considered one of the strongest in Europe. The citadel, on an island in the Elbe, serves also as a state prison, Baron Trenck and Lafayette having, among others, been confined in it.

Magdeburg is divided into the Old town, with the suburb Friedrichstadt, together composing the ancient fortress; and the New town—pop. 13,452 in 1861—and suburb of Sudenburg, with a pop. of 5,242 in 1861. The fortifications are so extensive that it would require an army of 50,000 men to invest the city. Magdeburg has one good and spacious street, called the Broadway, but all the other streets are narrow and crooked. There are two large public squares, in one of which is the cathedral. This, which is one of the finest Gothic structures of N. Germany, was erected between 1211 and 1363, and has been recently repaired at a cost of 300,000 dollars. It has two towers, each 340 ft. in height, a lofty vault, a handsome high altar, and numerous tombs and monuments, among which is that of Otho the Great and his empress.

Magdeburg has fifteen churches, one of which is for R. Catholics, a synagogue, an ecclesiastical seminary, a female high school, or royal boarding house for the education of girls, a teachers' seminary, with schools for agriculture, commerce, and surgery; five hospitals, a lunatic asylum, a workhouse, a humane institution, a savings' bank, and various charities; an arsenal, extensive barracks, and other military establishments; several public libraries, and a theatre. It is a bishop's see, and is the seat of the government, of the board of taxation, the superior courts of justice, the council, and the military commandant of Prussian Saxony. From its position on the Elbe, and at the junction of two important lines of railway, it is an *entrepôt* for the merchandise imported into and exported from the central parts of Germany. In other respects, also, it is very favourably situated for commerce. A canal, commencing about 20 m. below the city, connects the Havel with the Elbe, giving Magdeburg a direct water communication with Berlin and Frankfort on the Oder; and it is also the centre of a number of great roads which lead to all the cities and towns of importance within a radius of 50 m. Its manufactures, which are considerable, consist of silk, linen, cotton, and woollen fabrics; oil-cloth, hats, gloves, tobacco, soap, earthenware, refined sugar, chicory, and vinegar, with numerous tanneries, breweries, and distilleries. A large quantity of salt is made in its neighbourhood. It has several native banking establishments, and a branch of the royal bank of Berlin. Several newspapers are published in the town, which has uniformly an air of bustle and activity.

Magdeburg was repaired by Charlemagne, and improved and enlarged by Otho the Great. It has suffered numerous sieges. In 1631 it was taken by assault by the Imperialists under Tilly, by whom it was given up to military execution, and was nearly burned to the ground. It is the birthplace of the celebrated natural philosopher Otto de Guericke, and of the poet Schultz.

MAGELLAN, or MAGELHAENS (STRAIT OF), a strait at the S. extremity of S. America, separating Patagonia from Tierra del Fuego, Clarence Island, and the Isle of Desolation. It extends from Capes de las Virginas and Espiritu Santo, on the Atlantic, to Capes Victoria and de los Pilares, on the Pacific Ocean, a distance of about 300 m., having a breadth varying from 1½ to 40 m. It has an additional communication with the Pacific by Cockburn Channel and Magdalen Sound. Its shores are lofty and generally rugged, and its depth is in some parts very great, no bottom having been found with upwards of 1,500 ft. of line. Some safe and excellent bays communicate with it; but, generally speaking, its passage is extremely dangerous, both from the violence of the currents and the sudden and heavy tempests to which it is subject. It was discovered by Magelhaen, a famous Portuguese navigator in the service of Spain, in 1520. Drake traversed it in his voyage round the world, and it has since been frequently explored by British navigators.

Digitized by Google

MAGGIORE (LAGO DI), or Lake of Locarno, (an. *Lacus Verbanus*), a famous lake of N. Italy, lying partly in Italy, and partly within the Swiss canton of Tessin. It is long and narrow, stretching above 40 m. from Magadino at its N., to Sesto-Calende at its S. extremity; while in its widest parts, opposite to the mouth of the Toce, it is about 6 m. across, but its ordinary breadth does not exceed from 2 to 3 m. Its general direction is SSW. and NNE., and it may, in fact, be considered as an expansion of the Tessino, which enters it at its N., and leaves it at its S. extremity. In addition to the Upper or N. Tessino, it receives on its W. the waters of the Toce, and on its E. side those of the Tresa, flowing from the Lago di Lugano. Its only outlet is the Lower or S. Tessino. In some places it is not less than 300 fathoms deep; its waters, which are clear and of a greenish tinge, are well stocked with fish; and, like all Alpine lakes, its navigation is dangerous from sudden squalls.

The scenery of the Lago Maggiore is very varied. That of the upper part is bold and mountainous, its northern branch opening into one of the most beautiful valleys of the Rhætian Alps, which form a magnificent amphitheatre in the back ground. Towards the E. and S., the mountains gradually decline to the plain of Lombardy; and the lower part of the lake is of a more quiet and softened character, yet still very beautiful. Its immediate shores are richly fringed with wood, occasionally broken by picturesque crags, topped with castles and churches, and with numerous villages stretching along the water's edge. Though inferior in wildness and sublimity to the Lake of Como, and perhaps, also, to that of Lugano, the softer beauties of this lake are generally allowed to be the more attractive, contrasted, as they are, with the distant grandeur of the Alpine chain.

The Borromean Islands, from which this lake has derived a great portion of its celebrity, are situated in a bay, on its W. side, opposite to the mouths of the Toce. Of these the *Isola Bella* and the *Isola Madre* are the most famous. They are of small size, and, previously to the middle of the 17th century, were little better than bare rocks, but being the property of Count Vitaliano Borromeo, a descendant of the celebrated St. Carlo Borromeo, he resolved to make them his residence, and to convert them, according to the taste of the time, into a sort of Italian paradise. They were consequently covered with earth brought from the adjoining mainland, formed (especially the Isola Bella) into splendid terraces, lined with trees and statues, and ornamented with superb palaces. Unluckily, however, nothing is natural; all is art.

> 'On ev'ry side you look, behold the wall!
> No pleasing intricacies intervene,
> No artful wildness to perplex the scene;
> Grove nods at grove, each alley has a brother,
> And half the platform just reflects the other.
> The suff'ring eye inverted nature sees,
> Trees cut to statues, statues thick as trees!'
> Pope's Moral Essays, iv. l. 114.

For a lengthened period, however, these islands were the theme of universal admiration; but as a simpler and purer taste began to prevail, they came to be regarded with very different feelings, and have latterly, perhaps, been too much depreciated. These are now usually looked upon, by Englishmen at least, as little better than 'quarries above ground;' and as evincing only the wealth, extravagance, and bad taste of their founder.

MAGINDANAO, or MINDANAO, the most S. of the Philippine Islands, which see.

MAGNESIA *ad Sipylum* (now MANISA), an ancient town, of some celebrity, in Asiatic Turkey, 28 m. NE. Smyrna. Pop. about 30,000, of whom 4,000 are Greeks, 2,000 Armenians, and a few Jews. It is situated near the Kodus, or an. *Hermus*, embosomed in hills long noted for the production of loadstones, and is one of the cleanest and neatest towns of Asia Minor, being in the width of its streets, and other respects, far superior to Smyrna. The principal buildings are two mosques, with double minarets, indicating a royal foundation, and the interior of each is adorned with paintings, lamps, ivory balls, and ostriches' eggs, such as are to be seen in the mosques of Constantinople. There are 28 other mosques, and the Armenians, Greeks, and Jews have their respective places of worship. A Jewish college, lunatic asylum, and the mausoleum of Amurath II. are the only other public edifices, except the khans, which are numerous and well built. The manufacture of cotton and silk goods, and goats' hair shawls, employs many of the inhab., and the town derives some importance from being on the great road between Smyrna and the interior of Asia Minor.

Magnesia was, in all probability, colonised by the Magnesians of Thessaly, not long after the foundation of Cyme and Smyrna, two other Æolian cities. It is celebrated as the scene of a signal victory obtained by the Romans, under the two Scipios, over the forces of Antiochus the Great, who was consequently obliged to retire beyond the chain of Taurus, and leave Asia Minor at the disposal of the conquerors. The inhab. afterwards displayed great bravery in defending their town against Mithridates. In the reign of Tiberius, A.D. 17, Magnesia, in common with 11 other cities, was all but destroyed by an earthquake, and owed its restoration in a great measure to the emperor's generosity. '*Duodecim celebres Asiæ urbes collapsæ nocturno motu terræ; quo improvisior graviorque pestis fuit. Neque solitum in tali casu effugium subveniebat, in aperta prorumpendi, quia deductis terris hauriebantur. . . . . Asperrima . . . lues . . . in eosdem misericordiæ traxit: . . . centies sestertium pollicitus Cæsar, et quantum ærario . . . pendebant, in quinquennium remisit. Magnetes a Sipylo proximi damno ac remedio habiti.*' (Tac. Ann., ii. 47.)

It was a flourishing city at a late period of the Roman empire, but, at the commencement of the 14th century, passed into the hands of Sarkhan, sultan of Ionia, and finally was annexed, in 1448, to the dominions of Mahomet II., the conqueror of Constantinople.

The above city must not be confounded with *Magnesia ad Maandrum*, close to the modern Inek-bazar, and about 50 m. SSE. Smyrna, which, though a place of some consequence, was greatly inferior to the Magnesia *ad Sipylum*. It is remarkable, however, for the ruins of a theatre, stadium, and magnificent octastyle Ionic temple, said to have surpassed in the harmony of its proportions even the temple of Diana at Ephesus.

MAHABALIPOORAM, or MAVALIPOORAM, a village and a curious assemblage of rock temples in Hindostan, on the Coromandel coast, distr. Chingleput, about 33 m. SSW. Madras; lat. 12° 36′ N., long. 80° 16′ E. The temples in their general character closely resemble those at Ellora and elsewhere, on the W. side of Hindostan; but, from their being cut in a granite rock, they are in better preservation. They have been chiefly consecrated to Vishnu, whose worship appears to have predominated on this, as that of Siva on the opposite coast of India. At the foot of a hill N. of the village is a pagoda, about 26 ft. high, nearly as long,

Digitized by Google

and about half as broad, hewn from a single rock, and covered with sculptures. Near this temple, the surface of the rock, about 90 ft. in extent by 30 in height, is covered with bas-reliefs, including a gigantic figure of Krishna, another of his favourite Arjoon, and representations of a number of animals. Opposite to this, and surrounded by a stone wall, are 2 brick pagodas of great antiquity: adjacent to which are 2 excavations in the rock, one supported by pillars, in a manner somewhat like the cave at Elephanta, and the other fronting a sculptured group, supposed to represent one of Krishna's adventures. Still proceeding S., the traveller crosses a rocky hill, in which is a spacious excavation, in the middle compartment of which is a figure of Siva between Brahma and Vishnu; while at one end of the temple is a gigantic figure of Vishnu sleeping upon a cobra-di-capello, and at the other an eight-armed goddess, mounted on a lion, rescuing a human figure from a buffalo-headed demon. Several of the figures are executed in a very superior style. About a mile further S. are other sculptured rocks, said to surpass those already noticed. One pagoda is about 40 ft. in height, by 29 in length and breadth; and another 49 ft. in length and breadth, and 25 ft. in height, but rent as by some violent convulsion, from top to bottom; besides which there are three smaller structures, and large figures of a lion and an elephant, the last extremely true to nature. E. of the village, and washed by the sea, is an ancient stone pagoda, within which, also, are several sculptured figures. The sea has obviously encroached on this part of the coast, and it has probably submerged many temples that formerly existed here. Mahabalipooram is believed to have been anciently of considerable importance as a metropolis of the kings of the race of Pandion, in Hindoo mythology.

MAHADEO TEMPLE, a celebrated place of Hindoo worship in British India, prov. Gundwanah, on the Nerbudda, 60 m. SE. Hussingabad; lat. 22° 22′ N., long. 78° 35′ E.

MAHANUDDY (*Maha Nadi*, the great river), a considerable river of Hindostan, having its source in the prov. of Gundwanah; lat. 21° 30′ N., long. 81° E., and flowing mostly E. to the Bay of Bengal, which it enters by numerous mouths, about lat. 20° N., and between long. 85° 30′ and 87° E., after a course of more than 500 m. At Cuttack, about 70 m. from the sea, the river, in the rainy season, has a breadth of about 2 m.; but it is, notwithstanding, fordable at this point from Jan. to June. During the rains it is navigable for a distance of almost 300 m. from the sea. Its deposits consist of a coarse sand, hostile to vegetation, but frequently containing diamonds of the first quality, and which are occasionally of considerable size.

MAHE′, a sea-port town of Hindostan. It belongs to the French, and was formerly their principal settlement on the coast of Malabar, but is now of little importance. It is admirably situated on rising ground, beside a small river, navigable for boats to a considerable distance inland, 40 m. NE. Calicut. Pop. 6,000 in 1861, nearly all of native races. The town is well built, and has several handsome houses, with three churches. Its commerce is, however, small, and mostly confined to cocoa-nuts, pepper, and arrack.

MAHIM, a town of Hindostan, prov. Aurungabad, on the island of Bombay, near its N. extremity, in lat. 19° 2′ N., and long. 72° 58′ E. Pop. estimated at 15,000. It has a Portuguese church and a R. Cath. college.

MAIDA, a small town of Southern Italy, prov. Catanzaro, 8 m. S. by E. Nicastro. It is chiefly noted for an engagement fought in its vicinity, on the 4th July, 1806, when an English army under Sir John Stuart entirely defeated a greatly superior French force under Regnier.

MAIDENHEAD, a mun. bor. and market town of England, co. Berks, hund. Bray, on the S. bank of the Thames, 11½ m. E. by N. Reading, 27 m. W. London by road, and 22¾ m. by Great Western railway. Pop. 3,895 in 1861. The town consists almost entirely of one street extending from the river about 1 m. along the high road to Oxford, and lined with numerous respectable and a few handsome houses: it is well flagged and macadamised, and lighted with gas. The guildhall, in the market place, is a spacious stone building: there is also a handsome church, and the Wesleyan Methodists and Baptists have their respective places of worship. A national and infant school, with three Sunday schools, furnish instruction to the children of the poor, and there are almshouses and other charities for the sick and aged. The Bristol, Bath, and Exeter branch of the great western road is here carried over the Thames by a handsome stone bridge of thirteen arches, and about 500 yards S. from it is another bridge of three arches, forming part of the Great Western railway, which skirts the town in its whole extent. Maidenhead appears to be in a thriving condition: it has no manufactures, but is in the centre of an opulent neighbourhood, and derives considerable trading importance from its position on one of the most frequented roads of the empire. The bor. was first chartered by Edward III., and the corporation now comprises a mayor and three other aldermen, with 12 councillors. Markets on Wednesday; horse and cattle fairs, Whit-Wednesday, Sept. 29, and Nov. 30.

MAIDSTONE, a parl. and mun. bor., market town, and par. of England, co. Kent, hund. of its own name, in the E. div. of the lathe of Aylesford, on the E. bank of the Medway: 30½ m. ESE. London, and 35 m. W. Canterbury, on the South Eastern railway. Pop. of munic. bor. 23,016, and of parl. bor. 23,058 in 1861. The town, which is about 2 m. in length from N. to S., consists principally of a well-built street, leading NE. from the bridge to a lengthened narrow street, along the road from Rochester to Tenterden; but, exclusive of these, there are many smaller streets. Among the principal public buildings are the co. hall, a modern structure, decorated in the Italian style; the new gaol, an immense structure, erected, in 1818, at an expense of 200,000*l.*, covering more than 13 acres of land, and ranking as one of the largest and best arranged in England; the barracks near the gaol, the county ball-rooms, and a small but pretty theatre. The market-house, the lower part of which is appropriated to the sale of corn, stands in the centre of the town, and behind it is a market-place, conveniently arranged for the sale of provisions. The church, one of the largest in the kingdom, is an extremely handsome embattled edifice, with a lofty tower, formerly surmounted by a spire, destroyed by lightning in 1730: it was made collegiate in the reign of Richard II., and attached to an ecclesiastical college, destroyed with many others at the Reformation: the living is a perpetual curacy, in the gift of the Archbishop of Canterbury. There is a district church, erected, by the church-building commissioners, at a cost of 13,000*l.*; and places of worship are also supported by the Wesleyan Methodists, Independents, Baptists, Unitarians, and the Society of Friends. A free grammar-school was founded, in the reign of Edward VI., by the corporation, which has two exhibitions at University College, Oxford. Freemen have the privilege of sending their sons here

Digitized by Google

gratis, for classical instruction, the master making a charge for other branches of education. This school is not in a very flourishing state, and its inefficiency has led to the establishment of a proprietary school, which is well supported and attended. A blue-coat hospital was founded, in 1711, for the clothing and education of 53 boys and 43 girls, and there are three other endowed charity schools, and a Lancastrian school. Four sets of almshouses furnish lodging, clothing, and money allowances to 20 old women, and various bequests and charities exist for the relief of the sick and aged poor. A philosophical society was instituted in 1824.

Maidstone is in a very prosperous state, the population having nearly doubled in the course of thirty years. The only manufacture of any importance is that of paper: there are six paper-mills, employing above a thousand hands. The felt, blanket, and hop-bag manufactories are of much less extent. There is a considerable traffic on the river, which has been for many years gradually increasing; and the annual tonnage of vessels passing through Hallington lock, about 2 m. from the town, averages 150,000 tons. The principal articles of merchandise brought up the river are coals and timber for the supply of the neighbourhood, and also of Tonbridge, Sevenoaks, and the whole weald of Kent. A portion of the latter article is imported direct from the Baltic and America. The neighbourhood is celebrated for its abundant produce in hops and fruit, both of which are sent away by railway, or carried down the river.

Maidstone received its charter of incorporation from Edward VI., in 1549, but forfeited it in the following reign, owing to the connection of its inhab. with the insurrection of Sir Thomas Wyatt, Queen Elizabeth granted another charter, with increased privileges; but this also became void, by a *quo warranto*, soon after the Revolution of 1688; and a new charter was granted in 1748, by George II. Under the Municipal Reform Act of 1837 the borough is divided into three wards, the corporate officers being a mayor and 5 other aldermen, with 18 councillors. Corp. revenues 6,584*l.* in 1862, of which 3,703*l.* from rates. The Lent and summer assizes are held here, as also the quarter-sessions for the W. division of Kent. The recorder holds quarter and petty sessions within the borough, and a county court is established in it. Maidstone has sent 2 mems. to the H. of C. from the 6th of Edward VI. Down to the Reform Act, the right of election was vested in the freemen (by birth, apprenticeship, and purchase) not receiving alms. The limits of the borough were not altered by the Boundary Act. In 1865 it had 1,747 registered electors. Maidstone is also the chief place of election for the mems. for the W. division of the county. Large markets on Thursday for hops, corn, horses, and cattle: fairs for cattle, 1st Tuesday in each month, Feb. 13, May 12, June 20, and Oct. 17.

MAILCOTTA, a town of Hindostan, prov. Mysore, and a celebrated place of Hindoo worship, on a rocky hill, 17 m. N. Seringapatam; lat. 12° 39′ N., long. 76° 42′ E. The town, which is open and paved, has about 400 good houses, mostly occupied by Brahmins, and several rich pagodas. The most striking edifice is a temple dedicated to Narasingha (the man-lion), which stands on the highest pinnacle of the mountain, and is approached by a staircase cut in the rock, and ornamented at intervals with smaller temples and arches. It has, besides, a temple to Krishna, a square building of vast dimensions, entirely surrounded by a colonnade, and which is said to be extremely rich in jewels and other articles of value; and held in such esteem that Tippoo did not venture to outrage the prejudices of his Hindoo subjects by plundering it. There is also a large and fine reservoir at Mailcotta, surrounded by numerous buildings for the accommodation of devotees. Near this town the Mahrattas defeated Hyder Ali in 1772.

MAINE, one of the U. S. of N. America, being at once the most northerly and easterly state in the Union, extending between lat. 43° 7′ and 47° 20′ N., and between 67° and 71° W. long., having NW. and N. Lower Canada, E. New Brunswick, W. New Hampshire, and S. and SE. the Atlantic. Area, 31,766 sq. m.; pop. 628,276 in 1860. Maine has a greater extent of coast, and more good harbours, than any other state of the Union. Its shores are all along indented by deep bays; and the opposite sea is studded with numerous fine islands, some of considerable size. Near the coast, the surface is level, but it rises on proceeding inland, and most part of the state is hilly. In the NW. a mountain chain forms the watershed between the streams that join the St. Lawrence, and those that fall into the Atlantic; and a lateral branch from this chain, between lat. 46° and 46° 30′, separates the basins of the Kennebec, Penobscot, &c., on the S., from that of the St. John's on the N. Several of the summits in Maine reach an elevation of 4,000 ft.; and Mount Katahdin, near lat. 46°, which rises to 5,335 ft., is reckoned the highest ground between the Atlantic and the St. Lawrence. It has been estimated that 1-6th part of the surface of Maine consists of water: there are numerous lakes, chiefly in the N., the largest of which, Moosehead, is 50 m. in breadth. The St. John's river is elsewhere noticed: the Penobscot, Kennebec, Androscoggin, and St. Croix, have all a general S. direction, and several are navigable for the greater part of their length. The climate is cold: ice and snow last, in the N. and central parts, from October to April, and the summer is short: but the atmosphere is generally clear, the weather uniform, and the country salubrious. The soil on or near the coast is sandy and poor; but it improves greatly as it recedes inwards, especially along the banks of the rivers. The greater portion of the state was originally covered with dense forests of fine fir and beech. In the S., and some of the central parts, these have been mostly cleared; but they are still nearly unbroken in the N., and the value of the lumber cut down annually in the state is estimated at 10,000,000 dollars. Wheat, maize, rye, barley, potatoes, peas, beans, and flax are among the chief agricultural products. Apples and pears grow to perfection; and cherries, plums, and grapes grow in the woods. E. of the Kennebec, and along that river, are some excellent arable lands; and between Kennebec and Penobscot are some of the finest grazing lands in New England. Till lately the rearing of sheep has been the most important branch of rural industry, the annual value of the clip of wool being estimated at about 2,000,000 dollars. Good marble is found in some districts, and lime-burning is extensively carried on. Iron ore is abundant, and some lead has been discovered. Maine has manufactures of cotton and woollen cloths, hats, shoes, leather, cordage, nails, spirits, and maple sugar. The exports consist chiefly of lumber, great quantities of which are shipped for the West India islands, as well as for the neighbouring states; dried fish, pickled salmon, beef, pork, butter, wool, grain, hay, pot and pearl ashes, and marble. The state is intersected by railways in all directions, and has also numerous canals. The value of real estate and personal property was returned 190,211,600 dollars in 1860. The legislative power is vested in a senate of 31 mems., and a house of

Digitized by Google

representatives of 151 mems., who, together with the governor, are chosen annually by all the white male citizens above 21 years of age, who have resided in the state during the 3 months preceding the election, and paid taxes. The governor is assisted by an executive council of 7 mems., elected by the legislature. The general assembly of the 2 houses convenes annually at Augusta. The supreme judicial court has all the usual powers of a court of chancery. The judges are appointed by the governor with the consent of the council, and hold office during good behaviour. All judicial offices are, however, vacated at the age of 70 years. Each town is required by law to raise annually a sum equal to 40 cents for each inhab., which is distributed among the town schools in the ratio of the number of scholars in each. The state has 45 academies, a Baptist college at Waterville, theological seminaries at Bangor and Readfield, and Bowdoin College, with a medical school at Brunswick, established in 1794. Maine is divided into 10 counties. Augusta is the political cap., but it is inferior in point of size to several other towns, as Portland (which see), and Bangor. Bangor, at the head of the tide-water, has lately become the most important place on the Penobscot. The militia of the state, which is in 8 divisions, consisted, in 1864, of 38,514 men. Maine had a public debt of 1,472,000 dollars on the 1st of Jan. 1863, which included a 'war debt' of 800,000 dollars. The state sends 5 mems. to congress. Maine was first permanently settled by the British in 1635, previously to which it had only been transiently occupied by the French. It subsequently became a proprietary government, but in 1652 it was annexed to Massachusetts, to which it remained attached as a subordinate district till 1820, when it was constituted a separate state of the Union.

MAINE, a river of W. Germany. See MAYN.

MAINE, one of the old provs. of France, now distributed between the departments Mayenne and Sarthe.

MAINE-ET-LOIRE, a dép. of France, reg. W., formerly comprising the greater part of the prov. of Anjou, chiefly between lat. 47° and 47° 50′ N., and long. 0° and 1° W., having N. the dépts. Mayenne and Sarthe, E. Indre-et-Loire, S. Vienne, Deux-Sèvres, and Vendée, and W. Loire-Inférieure. Greatest length, E. to W., about 70 m., breadth usually about 40 m. Area, 712,093 hectares: pop. 526,012 in 1861. The Loire intersects the dép. from E to W., dividing it into two nearly equal parts, and is joined within its limits by the Maine, Anthion, Thonet and Layon. The Maine is a continuation of the Mayenne, which changes its name after it has been joined by the Sarthe. It passes by Angers, and unites with the Loire about 5 m. below that city. Its entire length is 8 m., throughout which it is navigable. About 440,196 hectares of the surface of this dép. are estimated to be arable, 80,023 in pasture, 38,260 in vineyards, 61,838 in woods, and 48,271 in heaths and wastes. More corn is produced than is required for home consumption. Agriculture, as in the contiguous departments, is rather backward: the lands in lease are all held on the *metayer* principle, the rent being a certain proportion, usually about half the produce: the occupiers are poor, uninstructed, and, of course, strongly attached to routine practices. Hemp and flax, prunes, melons, walnuts, apples, and various other fruits are said to be of superior quality. The produce of wine is estimated at about 500,000 hectol. a year. Some of the white wines are well esteemed, but the greater portion of the vintage is either converted into brandy or vinegar. The latter, which enjoys a high reputation, is known in commerce as *vinaigre de Saumur*. Exclusive of wine, this dép. produces annually from 50,000 to 60,000 hectol. of cyder. The industry of the rural pop. is, however, chiefly exercised in rearing and fattening cattle for the Paris markets, and in breeding horses. In 1862 there were stated to be 323,677 head of cattle in Maine-et-Loire—a greater number than in any other dép. of the W. of France; but, on the other hand, the stock of sheep, in the same year, was 135,455. The land is much subdivided, and there are only about 300 properties assessed at more than 1,000 fr. This dép. has the largest and most important slate quarries in France. These are situated near Angers, and are extensive excavations, in one place to the depth of 450 ft. below the surface. They employ more than 3,000 workmen, and several steam-engines, and yield about 80 millions of slates a year. At Chollet and other parts, some extensive woollen, cotton, and other manufactures are established, employing a large number of hands. At Angers is a large sail-cloth factory; wooden shoes are made at Moulicherne; and the department has numerous sugar refineries, breweries, distilleries, paper-mills, and dyeing-houses. At Angers is one of the two great schools of arts and trades established in France, at which about 450 pupils are supported partly or wholly at the expense of government. Maine-et-Loire is divided into 5 arronds.: chief towns, Angers, the cap., Baugé, Beaupréau, Saumur, and Segré.

MAINLAND. See SHETLAND ISLES.

MAJORCA (Span. *Mallorca*), the largest of the Balearic Islands in the Mediterranean Sea belonging to Spain, from the E. coast of which it is 110 m. distant, Palmas, the chief town, being in lat. 39° 38′ N., long. 2° 45′ E. Greatest length 48 m., do. breadth 42 m., area, 1,340 sq. m. Pop. 204,000 in 1857. Its shape is that of an irregular four-sided figure, the angles of which are formed W. by Cape Tramontana, N. by Cape Formenton, E. by Cape Peri, and S. by Cape Salinos. The surface is extremely uneven, and is divided into two nearly equal parts by a range of mountains, the highest of which, the Silla de Torillos, rises 5,114 feet above the sea. These mountains are not volcanic, but consist chiefly of granite, sienite, and porphyry, over which lie beds of grauwacké, clay slate, and coal; lead and iron are found, but not in sufficient abundance for mining purposes. The rivers or rather torrents of Majorca are short, rapid, and very numerous, affording great facilities to irrigation. The climate is exceedingly mild, salubrious, and agreeable; the thermometer during winter scarcely ever falls below 48°, its average height being 65°, and cold and strong N. winds are of rare occurrence. The temperature of summer varies between 84° and 88° Fahr.; but the heat is seldom oppressive, owing to the constant sea-breezes. The red loamy soil of the mountains, though stony, is extremely rich, producing spontaneously great numbers of wild olives and grapes: in the plains it is much less fertile, owing to the superfluity of moisture, and the absence of any system of drainage. Agriculture is in a very rude state; and the growth of corn, which in wet years totally fails, meets only half the consumption of the island, the annual imports of this article being about 6,000 fanegas, chiefly from Catalonia and Valencia. Olives are raised in very large quantities, the crops averaging about 180,000 arrobas yearly; the fruit is smaller than that of Andalusia, but as juicy as the best of the growth of Provence. Wine, both red and white, is abundant, especially near Banalbufar and Falaniche: considerable quantities are exported,

Digitized by Google

and much is likewise used in the distillation of brandy. Fruit and vegetables, especially oranges, figs, melons, carobs, pumpkins, and caulitlowers, grow plentifully, and attain a large size. Large quantities of saffron also are produced, of preferable quality to that of La Mancha. There is no want of fine pasture in the island, but little attention is paid to cattle-breeding. The sheep are large, and hogs sometimes attain the weight of 600 lbs., or about 38 stone. Mules and asses are reared in great numbers, and sent to Valencia and other provs. in the S. of Spain. Hares and rabbits, partridges, quails, snipes, &c., are abundant, and the coast swarms with fish of various kinds and good quality.

The trade of Majorca is, relatively to its size, very considerable, chiefly with Spain, France, and England: its exports comprise oil, wine, brandy, oranges, and other fruits, capers, saffron, wine, mules, and asses, with smaller quantities of home-made goods, as palm brooms and baskets, turnery wares, and water-proof hats for sailors, its imports consisting of wheat, salt beef, iron, sugar, groceries, woollen and cotton goods, and hardware, chiefly from France, England, and the N. of Europe; but the precise amount of the trade of Majorca cannot be ascertained.

The inhabitants bear a striking resemblance, both in their external appearance and general character, to the Catalans, being equally hardy and courageous, equally blunt and jealous of their honour, equally industrious and ingenious, equally good sailors and skilful farmers, with their continental neighbours: their language is a corrupt dialect of the Catalan.

Majorca comprises only two towns of any importance and 28 villages, the rest being mere hamlets. Numerous detached farms and country houses, however, are scattered over different parts of the island; and in all the fine valleys are numbers of elegant villas, in which the higher classes, who are usually much attached to a country life, spend a greater part of the year. The roads have also been considerably improved in recent years, and there is a tolerably good communication between different parts. The cap. of Majorca is Palma (sometimes also called Majorca), situated in a bay of its own name, on the S. side of the island, with a pop. of 51,871 in 1857. It is agreeably placed in a delightful country, and is strongly fortified; the houses are large and well built; but the streets being narrow, dark, and ill-paved, give it a mean appearance. The chief public buildings are the governor's palace, a large structure with extensive gardens, a cathedral, exchange, town-hall, and theatre. The inhab. are active, enterprising, and laborious; and almost the whole trade of the island is concentrated in its port. The road of Palma affords excellent protection for shipping, except during storms from the SE.; but the little harbour, called Puerto-Pi, is more secure, and furnishes anchorage for the largest frigates: the fort is defended by two well-fortified castles. Among the other towns of Majorca, the largest, with their respective pops., in 1857, are Llumayor 8,559; Campos, remarkable for its mineral waters and saltpans, 4,129; Santenay, celebrated for its stone-quarries, 5,451; Falaniche, where is made the best brandy of the island, 10,309; and Soller, 8,053. The small island of Cabrera lies 8 m. SSW. of Cape Salinas: it is covered with trees, and wholly uninhabited, except by convicts, of whom there is here a small *dépôt*.

The *Balearic Islands*, of which Majorca is the chief, were more anciently known as the Χοιράδες, so called, probably, from rising out of the sea like the backs of hogs. The Phœnicians made settlements in them at a very early period; and they were succeeded by the Carthaginians under Hanno, who founded *Mago* (Mahon), and *Jamnon* (Ciudadela), both towns of Minorca. The islanders were celebrated as the most expert slingers in the Carthaginian service during the Punic wars, and were afterwards equally noted as successful pirates, till Quintus Metellus subdued them, and hence obtained the surname of *Balearicus*. He was the founder also of two cities in Majorca, *Palma*, the present cap., and *Pollentia*, now Pollenza, the latter with 7,486 inhab. in 1857. Under the Roman empire, these islands belonged to the judicial district (*conventus juridicus*) of New Carthage in Tarraconensis, and from the reign of Constantine I. to that of Theodosius I., they had their own government. On the breaking up of the W. empire, they became an easy conquest for the Vandals and Huns, from whom they were afterwards wrested by the Moors. The people becoming notorious as pirates and robbers on the coast of Christian Europe, Charlemagne headed an expedition against them, and succeeded, not only in taking the islands, but in keeping possession of them for six years, at the end of which they were retaken by the Moors. The latter were expelled in 1285, when the entire group was formally annexed to the crown of Aragon.

MALABAR, a term usually applied to designate the whole W. coast of Hindostan from Cape Comorin to Bombay, but, strictly speaking, Malabar only extends as far N. as the Malabar language is spoken, or to lat. 12° 30′. The British prov. of Malabar is a district or collectorate under the Madras Presidency, extending between lat. 10° 12′ and 12° 15′ N., and long. 75° 10′ and 76° 50′ E., comprising several portions of territory, as Wynaad, &c., not belonging to Hindoo Malabar; and having N. Canara, Coorg, and Mysore, E. Coimbatoor, S. Cochin, and W. the Indian Ocean. Length, NW. to SE., about 150 m.; average breadth about 42 m. Area, 6,262 sq. m. Pop. 1,140,916, of whom 844,186 Hindoos, 282,027 Mohammedans, and 14,403 Rom. Catholics. In the E. the surface is mountainous, comprising a portion of the range called the W. Ghauts: the coast is low, and indented by many shallow inlets. Between these two regions the country mostly consists of undulating hills, separated by narrow valleys, in general watered by a rivulet. Nearly all the rivers have a W. course. The chief are the Cochin, Beypoor, Baliapatam, and Ponany: the bar of the first is navigable for ships drawing 15 ft. water, and the mouth of the second will admit vessels of 300 tons. Lakes and tanks inconsiderable. The year is divided into three seasons; the hot, from February to May; the wet, from May to October; and the cool during the remaining months. Dense fogs are rare on the coast, but they usually envelope the ghauts from April to the end of the year. The soil on the coast is sandy, but well adapted for the culture of the cocoa nut, jack, areca, plantain, cinnamon, and other trees, pepper, coffee, the sweet potato, and other farinaceous roots and garden vegetables. In the interior the soil is of the red kind common in the S. of India, and highly favourable for rice, which frequently yields two and sometimes three crops a year. The rice lands are sown after the first rains in April, and in four months the grain is ripe for the sickle. The second crops are raised by the transplantation of plants a month old, and are reaped in three months. The third crop is assisted by small reservoirs and tanks, and by turning water from streams. About 788 sq. m. are estimated to be under rice, and 120 in gardens and inclosures of productive trees. The sides of the

Digitized by Google

hills are often formed into terraces for cultivation. The rest of the surface, especially in the uplands, is chiefly covered with forests, among which the teak-tree is very prevalent, and an important source of wealth to the district, the teak of Malabar being considered, upon the whole, superior to every other variety. Besides the above articles of culture, the mulberry, mango, tamarind, sugar-cane, ginger, tumeric, mustard, arrow-root, hemp, and cotton, are grown, and wheat and barley on the hills. There are few cattle. The elephant and wild hog do great damage on the borders of the forests they inhabit: the tiger, bison, elk, and deer are also met with. Towns are rare in the interior, and villages there are spread over a large space, families usually living separate from each other within gardens inclosed by ditches and high banks. Iron is generally found, and gold, though in small quantities, in the sands of some of the rivers. Coarse cotton cloths are manufactured in a few places from the raw produce of the district; coir is made from the fibrous covering of the cocoa-nut; oil from its kernel, and arrack from the toddy in very large quantities. The chief exports consist of the products of the cocoa-palm, but pepper, betel-nut, and cloth from the districts to the E. are also exported. At Calicut, Tellichery, Cananore, and Ponany, the chief commercial towns, there are numerous Parsee and other opulent merchants. The roads throughout the district are in good order, and have convenient bungalows every 10 or 15 m. In Malabar, as in S. Canara, inheritance goes by the female line, among the Nairs and other Hindoo castes which inhabit the country. On the coast, a large proportion of the inhab. are Mohammedans, and many Moplays, a people originally derived from Arabia. The Christian religion appears to have been planted in this part of India at a very early period, and many churches were found existing by the Portuguese. Malabar was governed by various Nair dynasties, previously to its conquest by Hyder Ali, in 1761. On the fall of Tippoo Saib it became subsidiary to the British, and was incorporated with the Madras Presidency in 1803.

MALACCA and NANING, a British colony, on the W. coast of the Malay Peninsula, between lat. 2° and 3° N., and long. 102° and 103° E.; having NW. the territory of Sangalore, NE. those of Rumbowe and Johole, SE. that of Johore, and SW. the straits of Malacca. Area, 875 sq. m. Pop. estim. at 55,000, of whom 10,600 Chinese, 33,500 Malays, and 2,800 Europeans. Surface mostly undulating; the hills are covered with jungle, and the valleys rendered swampy by the rains. The coast also is swampy S. of the town of Malacca, but to the N. it is generally bold and rocky. There are several rivers, but the largest is only navigable by small vessels for 10 or 12 m. from its mouth. Opposite the coast are many small granitic islands, which serve for burialplaces to the Malay inhab. of the colony. The country is geologically composed of a granitic formation, overlain by laterite, and this again by a layer of vegetable mould, which becomes thicker the nearer the coast. The soil near the sea-shore is very productive, but in the interior it is otherwise; and Naning is much more valuable for its tin mines than for the products of its agriculture. The climate is more salubrious perhaps than that of any other British coast settlement in the East. It has been found that, during a period of seven years, the deaths among the troops stationed here amounted to less than 2 per cent.; and instances of longevity are frequent among both Europeans and natives. The mean annual temperature is about 77° 6′ Fah.; and there is but little change throughout the year in the barometer, which stands at about 30°. Rain falls continually at intervals of a few days; but as rather more occurs between September and January than at any other time, that period is termed the wet season. Violent squalls and storms of lightning occur during the SW. monsoon. The produce of Malacca consists chiefly of rice, jaghery, sago, pepper, rattans, timber, cocoa-nuts, a few nutmegs, cloves, dammer, gambier, gum lac, ivory, gold dust, tin, fruits, poultry, and cattle. A few years ago the rice raised in the colony was scarcely sufficient for four months' consumption, the additional supply being brought from Acheen, Java, and Bengal. A principal cause of this was the former policy of the Dutch, who, while Malacca belonged to them, prohibited the raising of any kind of grain, in the view of rendering the inhab. wholly dependent for their supplies on Java. The British government, however, has given every encouragement to native agriculture. Cocoa-nuts form a considerable portion of the food of the lower classes of natives, who also subsist partly by fishing.

This settlement was formerly included in the presidency of Bengal, but has, since 1851, its own governor, together with Penang and Singapore.

MALACCA, a town on the W. coast of the Malay Peninsula, cap. of the above British colony, at the mouth of the river of the same name, lat. 2° 14′ N., long. 102° 12′ E., about 100 m. NW. Singapore, and 220 m. SSE. Penang. Pop. estim. at 12,120, of whom about 4,000 Chinese, 3,000 Malays, 2,000 Chuliahs, and 2,000 Europeans. The town is divided by the river into two parts, connected by a bridge. On the left bank rises the verdant hill of St. Paul, surrounded by vestiges of an old Portuguese fort. Around its base lie the barracks, lines, and most of the houses of the military; the stadthouse, court-house, gaol, church, civil and military hospitals, the site of the old inquisition, convent, the police-office, the school, post-office, and master attendant's office. On its summit stand the ruins of the ancient church of our Lady *del Monte*, erected by Albuquerque, and the scene of the labours and miracles of that 'Apostle of the East,' St. Francis Xavier; also the light-house and flag-staff. A little to the S. rises the hill of St. John's, and in the rear rises that of St. Francis. On these eminences are the remains of batteries erected by the Portuguese and Dutch, commanding the E. and S. entrances to the town. Smaller knolls intervene, covered with the extensive cemeteries of the Chinese. The tombs are white, and constructed with much care, and surrounded by low walls of brick and chunam, in shape resembling a horse-shoe. The bazaars, and by far the greatest part of the town, are situated on the right bank of the river. The anchoring ground in the roads is secure; and though large vessels are obliged to lie at a distance of 2 m. from the shore, accidents have been rarely known to happen. Native craft anchor much nearer, under the lee of one of the islets close in-shore.

The principal public institution at Malacca is the Anglo-Chinese College, established in 1818. Its main objects are the cultivation of Chinese literature by Europeans, and of European literature by the Chinese, Malays, and surrounding nations, and the diffusion of Christianity. The college has a library, well stocked with European and Chinese books, and Siamese MSS.; and attached to it is an English, Chinese, and Malay press. This college was founded by Dr. Morrison, the Chinese scholar, from whom, also, it received a small endowment. There are also in the town 5 Chinese schools, with about 100 scholars, besides several Hindoo and

Digitized by Google

female schools, and schools established by the Malays, for their own instruction in English. A full account of the mode of education in the Chinese schools may be seen in Newbold's work on Malacca.

Malacca was formerly a place of considerable trade; but, owing to the superior advantages of Penang and Singapore, its commerce has rapidly decreased within the last 10 years, and it is now very limited. It exports small quantities of gold dust, balachong, hides, hogs, fowls, jaghery, pepper, dammer, cordage, a little ebony and ivory; iron implements, fire-arms, and nails, manufactured by the Chinese smiths at Malacca, with rattans, lac, and aloe-wood. The gold and tin are not the produce of the British territory, but of the adjacent native states, whence they are brought to Malacca by native boats, or overland by coolies. The principal imports are earthenware, iron, rice, sago, opium, nankeens, European and Indian piece-goods, woollens, paper, provisions and liqueurs, for the European and Chinese inhab.; salt, sugar, tea, and tobacco, partly for home consumption and partly for re-shipment.

Malacca is said to have been founded in 1252, by Iskander Shah, a chief from Singapore, and it soon became a large and flourishing city, its influence extending over all the peninsula and the adjacent islands. It was first visited by the Portuguese in 1508, and captured by them in 1511. In 1641 it was taken by the Dutch, and in 1795 by the English. The latter held it till 1818, when it was restored to the Dutch; but, in 1825, the latter finally exchanged it in return for the settlements of Bencoollen, on the coast of Sumatra.

MALACCA (STRAITS OF), a channel of the Eastern Seas, extending from lat. 1° and 6° N., and long. 98° and 104° E., between the Malay Peninsula on the NE. and the island of Sumatra, on the SW. Its length, NW. to SE., may be estimated at about 520 m.; its breadth varies from 25 m. opposite the Naning territory, to nearly 200 m. at its N. extremity. It is the best and most frequented passage from the Indian Ocean to the China Sea.

MALAGA, an important city and sea-port of Spain, k. Granada, and prov. of its own name, at the bottom of a deep bay, on the Mediterranean, 68 m. NE. Gibraltar, and 254 m. S. by W. Madrid, with which it is connected by railway. Pop. 94,293 in 1857. The town is built along the shore, at the foot of mountains gradually descending towards the sea: westward is the Vega, watered by the great river of Malaga, which delivers a large body of water from the E. end of the Serrania de Ronda; and, on the other side, rise naked rugged mountains, overhanging the shore, and scarcely leaving room for the town. But the most imposing view of Malaga is from the sea. It stands in the centre of a wide bay, flanked by lofty mountains, and by the picturesque ruins of its ancient fortifications and castle, which cover the hill rising immediately to the E., and seem, from their great extent, like the remains of a former state. The streets, as in all Moorish towns, are very narrow, many being only 8 ft. wide, with others still narrower, badly paved, and dirty to a proverb: the houses are high and large, built round a court, the interior having a clean and neat appearance, owing to the abundant use of whitewash. There is only one square in the town, and the churches, as well as convents, are so crowded among the houses, that their beauty, if they have any, is effectually concealed. The only handsome feature of the town is the Alameda, or public walk, the buildings round which are magnificent: the other parts present a labyrinth of narrow intricate streets, inhabited by the tradespeople. The chief public buildings and establishments are a cathedral, with a chapter, 4 par. churches, a bishop's palace, 4 hospitals (one of which is for military), a legal seminary, royal college of medicine and surgery, a foundling asylum, a large *depôt* for convicts, a custom-house, and 2 endowed schools. Among these, however, the only edifice worth notice is the cathedral, a large building, having a spire 270 ft. in height: like that of Granada, it is in the transition style, between the Gothic and classic: the roof, instead of being groined, is divided into numerous small circular domes, somewhat like the marigold windows of Gothic architecture; and the modern additions to the building, though not quite in keeping, are on the whole designed with good taste. The high altar and the pulpit are of flesh-coloured marble; but the part which most rivets the attention is the choir, called by the biographer Palomino, the eighth wonder of the world, and admirable for the perfection of its carved works, representing in very bold relief the twelve apostles, and most distinguished of the saints.

On a sharp point of rock commanding the city stands a fine old Moorish castle, in good preservation, called the *Gibralfaro* (prob. *Gebel-al-faro*, the great watch-tower), built on the site of a Roman fortress, but still wholly of Arabic architecture: it is altogether, both from its shape and situation, a very curious structure; and, if fortified on the modern system, might be rendered impregnable. Another Moorish building, in tolerable preservation, was formerly the *darsena* or dock for the ancient galleys, now used as a storehouse. The *Alcaçaba*, an Arabian palace, once occupied a site near the shore; but the greater part of it was pulled down to make room for the custom-house. At a short distance from Malaga is one of the magnificent but unfinished undertakings of Charles III., a bridge and aqueduct over the great river of Malaga, which flows about a league distant from the city; but this work, on which a great outlay was incurred, was rendered useless a few years afterwards by a work undertaken by a bishop, who, at his own expense, brought water into the city by a much shorter line.

Malaga not being a ship-building port, the number of registered vessels is not very great. In 1864, there were fifty square-rigged vessels on the list, the whole of them belonging to three or four of the principal merchants. These vessels are usually engaged in voyages to the West Indies, South America, and Newfoundland, carrying the fruits, wine, and oil of the country, and returning either with sugar, coffee, &c. from the Havana and Porto Rico, cocoa and logwood from South America, cotton from the States, or salt fish from Newfoundland. The principal articles of general export are wines and fruit, particularly raisins, almonds, grapes, figs, and lemons: there is likewise a considerable, though smaller, exportation of olive oil, with brandy, anchovies, cummin-seed, aniseed, barilla, and soap. Lead is also brought for shipment from the mines of Alora in Granada. The imports comprise salt-fish, iron-hoops, bar-iron, and nails; cotton fabrics, hides, and earthenware; with woollen cloths, all sorts of colonial produce, butter and cheese from Holland and Ireland, and linens from Germany. The trade with England has been for some time diminishing, owing to the small demand for Malaga wine; but the trade with America has considerably increased, owing to the pretty large consumption both of the fruit and wine shipped at this port.

The following is the official return of the shipping which entered and cleared the port in the year 1863:—

Digitized by Google

Flag	Entered		Cleared	
	Number of Vessels	Register Tonnage	Number of Vessels	Register Tonnage
Spanish . . .	2,886	274,968	2,939	279,938
British . . .	137	29,488	141	30,108
French . . .	90	16,661	89	16,520
Italian . . .	72	13,206	72	13,23[illegible]
Danish . . .	51	7,445	54	7,738
Swedish and Norwegian	33	8,262	30	6,332
Dutch . . .	29	8,406	31	9,239
United States .	27	11,938	32	11,98[illegible]
Portuguese . .	17	1,941	18	2,096
Hanoverian .	14	1,514	16	1,764
Russian . . .	14	3,450	11	2,699
Prussian . . .	9	2,325	8	2,076
Belgian . . .	3	1,064	6	806
Other . . .	6	1,594	8	2,101
Total . .	3,388	382,262	3,455	386,635

The wines of Malaga are of two sorts, sweet and dry: and of the former of these, there are three varieties: 1st, the common 'Malaga,' known and exported under that name, in which there is a certain proportion of burnt wine, which communicates its peculiar taste to the 'Malaga:' the grape from which this wine is made is white, and every butt of Malaga contains no less than 11 gallons of brandy; 2dly, 'Mountain,' made from the same grape as the other, and, like it, containing colouring matter and brandy, the only difference between the two being, that for 'mountain' the grape is allowed to become riper; 3dly, 'Lagrimas,' the richest and finest of the sweet wines of Malaga; it consists of the droppings of the ripe grape hung up, and is obtained without the application of pressure. The dry wine of Malaga is produced from the same grape as the sweet wine, but pressed when greener: in this wine there is ⅛ more brandy than in the sweet wine; at least 1-12th part of the dry Malaga being brandy. The whole produce of the Malaga vineyards is estimated at from 35,000 to 40,000 butts; but, owing to the increasing stock of old wine in the cellars, it is impossible to be precise in this calculation. The export of Malaga wines may be stated at about 27,000 butts. The principal markets are in the United States and the states of S. America, to which countries the exports are rather on the increase. The average price of the wines shipped from Malaga does not exceed 35 dollars per butt; but wines are occasionally exported at so high a price as 170 dollars. Many attempts have been made at Malaga to produce sherry, but not with perfect success. The Xeres grape has been reared at Malaga, upon a soil very similar to its native soil. One reason of the very low price of the wines of Malaga is the chapness of labour; field labour is paid by 2½ reals a day (4½*d.*), wages during the fruit and vintage time being about double.

Next to its wines, the chief exports of Malaga are fruits; as raisins, almonds, grapes, figs, and lemons. The raisins are of three kinds, muscatel, bloom, or sun raisins and lexias. The muscatel raisin of Malaga is the finest in the world, and in its preparation no art is used, the grape being merely placed in the sun, and frequently turned. The bloom, or sun raisin, is a different grape from the muscatel, but the process of preparing it is the same; like the other, it is merely sun dried. The lexias acquire this name from the liquor in which they are dipped, and which is composed of water, ashes, and oil; these, after being dipped, are also dried in the sun. All muscatel raisins are exported in boxes, and also part of the bloom raisins.

Malaga has an excellent harbour, formed by a fine mole, 700 yds. in length, at the end of which is a lighthouse, furnished with a powerful light, revolving once a minute. A shoal that had grown up round the mole-head has been removed by dredging. The harbour, which will accommodate more than 450 merchant ships, may be entered with all winds, and affords perfect shelter. Communication by steam has considerably increased of late years along the coast of Spain, and its operation has produced a corresponding degree of prosperity. During the prevalence of westerly winds, sailing vessels were frequently unable to pass through the Straits of Gibraltar, the adoption of steam as a motive power, therefore, has materially altered the nature of the navigation in this quarter. The steam vessels on coasting voyages touching at all the available ports round the Spanish Peninsula have almost superseded the coasting trade of the slow lateen craft; and hence one of the sources from which Spain has lately derived her increased prosperity and an infusion of life and vigour into her former inanimate commercial intercourse. Almost daily communication has been established by this means between the ports on the coast, and long lines of steam vessels have been established between Malaga, Gibraltar, Liverpool, and London, with Marseilles and Nantes, Hamburg, and other intermediate stations, to which may be added nearly all the principal ports of the Mediterranean.

Malaga, independently of its export trade, has manufactures of linen and woollen cloths, sailcloth, ropes, paper, leather, hats, and soap; an iron foundry and a cigar manufactory; but, excepting the latter, they are all on a small scale, and insufficient for the consumption of the inhab. Pilchard and anchovy fisheries also give employment to a considerable number of the lower classes. The market is well supplied, the show of fruit in particular being unequalled in Spain. Melons, pomegranates, and prickly pears, which, with fish, constitute the principal food of the lower orders, are so cheap as scarcely to form an article of expenditure.

The general aspect of the pop. of Malaga is even more Moorish than that of Seville, and affords innumerable pictures of idleness. Hundreds of the lower classes appear in the streets doing nothing, sitting on the ground, lolling against a wall, or lying on the steps of church doors, wrapped in brown, ragged, and patched cloaks. In fact, Malaga is noted for idleness and demoralisation. The necessaries of life being so cheap, there are few motives to industry: begging is very common, and was long encouraged by the ill-judged bounty of the old monasteries, suppressed in 1835. The more respectable classes of the people are agreeable, hospitable, and generally fond of society, the ladies being equally witty and high-spirited with those of Seville, quite as showy in dress, and not a whit more strict in morals. The Italian Opera is a favourite resort, and many ladies are good musicians. Numerous foreigners also reside in Malaga, especially English and Americans, who constitute, with a few of the government officers and merchants, the *élite* of society. Most of these have country seats in the environs, the beauty of which is not surpassed in any part of Andalusia. The weather during summer is intolerably hot, and at this season, especially during the prevalence of the hot S. winds, the inhab. exclude the sun as much as possible, and remain at home during the day; but when the heat is succeeded by the refreshing coolness of the evening, the whole pop. is astir, and after nightfall the young people bathe for hours in the sea, a practice quite as conducive to health

Digitized by Google

as pleasure. Nervous and epidemic fevers are still, however, very prevalent, and sometimes carry off great numbers of people.

Malaga, like most other cities of Spain, has had various masters. Built by the Phœnicians, and called by them *Malacha*, it came successively into the hands of the Carthaginians and Romans, both of whom procured from it considerable supplies of salt-fish and provisions. It then passed into the hands of the Goths; and from them, in 714, to the Moors, who were at length driven hence by Ferdinand the Catholic, in 1487. The yellow fever carried off nearly 22,000 of its inhab. in 1803, and reappeared, though attended with less fatal consequences, in 1813. Malaga was taken by the French in 1810, after an obstinate conflict with a body of Spaniards, officered by monks, and commanded by a Capuchin friar; and remained in their possession till 1812.

MALAY PENINSULA, a long and narrow territory, forming a part of India beyond the Brahmaputra, and the most S. portion of continental Asia, lying chiefly between the 1st and 8th degs. of N. lat., and the 98th and 104th of E. long.: it has N. Lower Siam, with which it is connected by the isthmus of Kraw; and is on all other sides surrounded by the sea, called on the W. and S. the Straits of Malacca and Singapore; and on the E. the China Sea and Gulf of Siam. Length, NNW. to SSE., 450 m.; breadth varying from 50 to 150 m. Area estimated at 45,000 sq. m. As far as lat. 6° S. the country is claimed by the Siamese; but, beyond that point, the peninsula is subdivided among indep. native states and British colonies.

Physical Geography.—The central and longest of the mountain chains, passing S. from the table land of Yunnan, through the Ultra-Gangetic peninsula, traverses this territory in its entire length. This mountain chain diminishes in height as it approaches the equator; and its highest peaks in Rumbowe and Johore probably do not exceed 3,000 ft. in elevation; while many peaks in the N. part of Quedah are supposed to rise to upwards of 6,000 ft. above the sea. M. Ophir, a detached mountain in about lat. 2° 30′ N., and long. 102° 30′ E., has been roughly estimated at nearly 5,700 ft. in height, but it is much more lofty than any other summit in the S. part of the peninsula. Between the above mountain chain and the coast, the surface is undulating, covered with dense primeval forests, or interspersed with grassy plains, which are by far the most numerous and extensive in the N. An abundance of rivers descend to either coast, in their progress frequently forming marshes and lakes, some of which are of considerable size. Their banks are generally low, swampy, and covered with mangrove and other thickets; and though several of them are broad, and moderately deep, the sand-banks, coral reefs, &c. at their mouths, usually preclude their navigation by vessels of any magnitude. A number of verdant islets stud the coasts, especially the north-western and the southern.

Geology and Minerals.—The Malay mountain chain, as far as it has been hitherto explored, consists chiefly of grey stanniferous granite and clay-slate. At its S. extremity, porphyry occurs; hornblende is met with near Malacca; and quartz is very abundant around M. Ophir and elsewhere. The geology of the E. coast is almost wholly unknown; but, along the W., laterite, similar to that of the Malabar coast, is a very prevalent formation. Clay-slate, sandstone, argillaceous schist, jasper, limestone, grauwacké, and limestone are the other most prevalent rocks. Limestone composes a portion of several of the islands off the W. coast, while those off the S. coast are chiefly of granite or sienite. The Elephant rock in the Quedah territory is a mass of calcareous breccia, having many stalagmitic caverns, and interspersed with an abundance of fossil remains. At the S. extremity of the peninsula are evident traces of volcanic action; and numerous thermal springs, scattered over the country, testify the activity of subterranean heat at no great distance below the surface. These are sulphureous and saline. The springs at Ayer-pannas, near Malacca, were found by Newbold to have a temp. of 120° Fahr. at noon, and of 113½° at 6 A.M.

The Malay Peninsula produces tin, gold, and iron: tin is, in fact, among its principal articles of export. Mr. Crawfurd observes, that tin, wherever found, has a limited geographical distribution; but that, where it does exist, it is always in great abundance. The tin of India has, however, a much wider range of distribution than that of any other region, being found in considerable quantity from long. 98° to 107° E., and from lat. 8° N. to 3° S. It has been latterly stated that it is found in abundance at Sakána, in the interior of Tavoy, lat. 12° 40′, and in Siam even as far N. as 14°. At any rate the Malay Peninsula appears to be the centre of the region in the eastern seas in which tin is distributed; and, including the island of Junk-Ceylon, it has been roughly estimated that its annual produce of this metal amounts to 34,600 piculs of 133⅓ lbs. avoird. The ore of the peninsula is extremely pure, being that which is called stream. The ore of Sunjie-ujong, Naning, and Perak is reported to yield 76 per cent. metal, whereas the ores of Cornwall, with all the advantages of European science and ingenuity, do not yield more than 75 per cent. But the process of smelting, as conducted by the Malays, being very defective, and adulteration frequent, the peninsular tin fetches only from 14½ to 15 dollars the picul; while the tin of Banca, wrought by Chinese, sells at from 16 to 16½ dollars. The export of peninsular tin may amount to about 2,000 tons a year, including from 400 to 500 tons received from the Malacca Straits and Banca.

The Malay Peninsula does not by any means so well merit the term *Aurea Chersonesus*, which has been before applied to it, as the neighbouring island of Sumatra. The exports of gold from the SW. coast of that island average 26,400 oz. a year, while the annual produce of the peninsula is roughly estimated at less than 20,000 oz. It comes chiefly from the E. coast, and M. Ophir, where it occurs disseminated through quartz, in thin granular veins, and in alluvial deposits. Iron is found in Quedah, but only in small quantities.

The Climate is remarkable for its continual moisture, to which circumstance the perpetual verdure of the peninsula is mainly owing. The year is divided into the wet and dry seasons; but the term 'dry season' must not be understood in the same sense as when applied to the climate of Hindostan; for, during its continuance, even three successive days rarely pass without a shower. On the W. coast the dry season comes in with the SW. monsoon in May; the wet season, with the NE. monsoon in October. Thunder storms, whirlwinds, waterspouts, and other atmospherical phenomena are frequent, especially during the SW. monsoon.

Vegetable Products are both numerous and valuable. They include a host of trees, the timber of which is adapted for house and ship-building; the finest fruits of tropical climates, bamboos, canes, and rattans, of which the jungles are in

Digitized by Google

great part composed; the areca, sago, and gomuti palms, the catechu, dragon's blood, and India rubber plants, the upas of the Javanese. It has been denied that teak is indigenous to the country; but the inland Malays affirm that it is occasionally found, and is known under the name of *jâti*. The wild nutmeg is a native of the country. The true nutmeg, cinnamon, and clove have been long introduced, and thrive well. Tobacco, coffee, sugar, cotton, and the true indigo (*Indigofera tinctoria*), are cultivated with much success. Mr. Crawfurd (Embassy to Siam, i. 178) estimates that the Malay Peninsula produces 28,000 piculs of pepper a year, or about 1-13th part of the total produce of the E. Rice and other kinds of grain are not grown in quantities sufficient for home consumption, and are therefore imported chiefly from Bengal and Sumatra.

Elephants roam over the peninsula in great numbers: the rhinoceros, tapir, wild hog, the royal and the spotted black tiger, two kinds of bears, and two species of bison, the axis, plandok, musk-deer, and several other kinds of deer, the vampire, and many varieties of bats, and numerous monkeys, are among the wild animals. The buffalo is a native, and is domesticated; but neither the cow, camel, horse, nor ass are met with in a state of nature. The great density of the jungles is considered unfavourable to the increase of feathered game; but waterfowl are plentiful, and there are a great many pheasants of the richest plumage. Crocodiles, alligators, and several kinds of formidable serpents are met with. The dugong, many turtles, and a plentiful supply of fine fish are caught in the surrounding seas.

People.—The Malays have been ranked by some authors as one of the five great families, or varieties, of the human race. But this opinion is by no means generally entertained. Both their features, and those of the aborigines in the native states around Malacca, are decidedly characterised by the Mongol stamp. And independent of the Malays having no peculiarity of form or feature to entitle them to be called a distinct variety, there appears to be sufficient evidence to show that they are a mixed race, of comparatively recent origin. Antecedent to the twelfth century of our era, the coasts of the peninsula and the adjacent islands were inhabited, though thinly, by a tribe of *icthyophagi*, and the interior by a race of negro savages, by whose descendants it is still occupied. In the course of the above century, a body of colonists, the ancestors of the present race of Malays, arrived on the continent, from Menankabowe, in Sumatra; and whether by intermarriage (as traditionally reported) or by conquest, extended their dominion over the whole peninsula. During the succeeding centuries they conquered Sumatra, the Sunda, Philippine, and Molucca Isles, with many smaller groups; and are now found in all those regions, and in Borneo, but without any centre of unity or power. The chief physical characters of the Malay race consist in a brown colour, varying from a light tawny to a deep brown; black hair, more or less curled, and abundant; the head rather narrow; the bones of the face large and prominent; the nose full, and broad towards the apex; and the mouth large. The average height of the men is about 5 ft. 2 in. A general character can hardly be assigned to a people so widely distributed. The Malay inhab. of the peninsula are, however, active, restless, and courageous; but their courage is not of a steady, deliberate character, but is rather a sudden ungovernable impulse, arising from a paroxysm of rage. To their enemies they are remorseless, to their friends capricious, and to strangers treacherous. Perhaps, their treachery to strangers may, in part at least, be occasioned by the behaviour of the latter, or the antipathy excited against them by the behaviour of former strangers. A propensity to gambling is a distinguishing trait in the Malay character; and more especially a taste for cock-fighting, to which sport the Malay is so passionately addicted, that his last morsel, the covering of his body, his wife and children, are often staked on the issue of a battle to be fought by his favourite cock. A disregard of human life, revenge, idleness, and piracy may be considered common to Malays. The universal practice of going armed makes thoughts of murder familiar. The right of private revenge is universally admitted, even by the chiefs; and the taking of life may be atoned for by a small sum of money. In the arts of peace they are greatly inferior to their neighbours of Java, Japan, Cochin-China, and Siam. The Malay language coincides with monosyllabic tongues in its general construction and analogies, but is properly polysyllabic in its form. It consists chiefly of Polynesian, an intermixture of Sanscrit and Arabic, and a dialect purely Malayan, which last, however, constitutes little more than one-fourth part of the written and spoken language. The literature of the Malays is almost entirely derived from Hindostan, Persia, Arabia, Java, and Siam. Arabic is exclusively their sacred language, and their religion also has been derived from Arabia, all the Malays, with trifling exceptions, being Mohammedans.

The negro tribes which inhabit the interior of the peninsula are called by the Malays *Orang Benua*, men of the soil. They appear to be a distinct variety, differing from and being inferior to both the African and Papuan negro. The average height of the men is only 4 ft. 8 in. The Malay negroes are thinly spread over a considerable extent of territory in and behind Malacca, and thence N. to Mergui; but they probably amount in all to only a few thousands. They are divided into several tribes, some of which are said to dwell altogether in trees or clefts in the mountains. A few have learned a little Malay, and occasionally venture among the adjacent Malay tribes to purchase tobacco and utensils; but of letters they know nothing. (Copious accounts of both the Malays and this people may be found in Newbold's 'Malacca,' vol. ii. ch. 12, 14, 15; and various details respecting the races inhabiting the Malay countries are given in the art. E. ARCHIPELAGO in this Dict. For the *Commerce* of the British settlements, see MALACCA and SINGAPORE.)

The principal articles of export from the native states are tin, gold-dust, spices, elephants' teeth, pepper, sago, sugar, canes, timber for ship and house building, dammer, ebony, bees' wax, betel nut, sapan and eagle woods, hogs, poultry, buffaloes, tiles, and an immense variety of fruits; in return for which, opium, salt, cotton, cloths, tobacco, rice, and some European manufactures are the chief imports. The trade is principally with the British and Dutch settlements in the East, Siam, China, and the adjacent parts of the E. Archipelago.

In the fifteenth century, a large proportion of this peninsula appears to have been under the sway of the Siamese; but, since that time, it has been mostly divided into the petty states before enumerated, the historical details of which are destitute of interest. The successive settlements made by the Portuguese, Dutch, and British at Malacca are elsewhere noticed. The only recent event worthy of mention has been the subjugation of Quedah (or Keddah) by the Siamese, begun in 1821, and completely effected within about ten years afterwards.

Digitized by Google

MALDA, a town of Hindostan, prov. Bengal, district Dinagepoor, on the Mahanunda, built chiefly of the ruins of Gour, from which it is distant about 12 m. N. Early in the present century it had 3,000 houses huddled together along the bank of the river, which, during the rainy season, nearly insulates the town. The E. I. Company established a factory here as early as the seventeenth century; and there were formerly some prosperous French and Dutch silk and cotton factories in the town; but the trade of Malda has now sunk into irreparable decay, its manufactured goods being unable to withstand the competition of those introduced into India from Europe.

MALDIVE ISLANDS, or MALDIVES, a chain of islands in the Indian Ocean, extending between the 1st deg. of S. and the 7th of N. lat., a distance of about 560 stat. m.; and between 72° 48′ and 73° 48′ E. long. The Laccadive Islands, to the N. of the Maldives, may not improperly be considered a continuation of this island-system. They are of coralline formation, arranged in round or oval groups called *atolls*, separated by several channels, which may be safely navigated by ships of the largest size. The different groups are surrounded by coral reefs, on which the surf beats violently; but between the islands the sea is perfectly smooth, and forms safe harbours for small craft. These islands have been rarely visited by Europeans, though lying in the direct route to India. All that are of any extent are richly clothed with palms and other trees; but no edifice has been seen in sailing past them, whence it may be concluded that none exists higher than a cocoa tree. The Maldives produce millet and other small grains, of which they have two harvests a year; but they are unsuitable for rice and wheat, which are imported. Esculent roots and fruits are found in the greatest profusion; and poultry are extremely abundant, and bred with little or no attention. There are neither horses nor dogs, and but few horned cattle. Fishing is an important occupation, especially that of cowries, a species of shells used as money in small payments in Hindostan and other Asiatic countries, and in extensive districts in Africa. The inhab. trade with Hindostan and Sumatra, arriving at Balasore and other ports of British India during the SW. monsoon with cowries, coir, the produce of the cocoa tree, salted fish, and tortoise-shell; and sailing homeward with the NE. monsoon, taking rice, sugar, manufactured goods, and tobacco. The people of the Maldives are Mohammedans, and probably of an Arabic stock. They live under a sultan, who resides in Male, an island about 3 m. in circuit, fortified by walls and batteries, on which above 100 pieces of artillery are mounted. The sultan, however, considers himself dependent on the British government of Ceylon, to which he sends an annual embassy.

MALDON, a parl. and mun. bor., river port, and market town of England, co. Essex, hund. Dengey, on the Chelmer, 14½ m. SW. Colchester, 37 m. ENE. London by road, and 44 m. by Great Eastern railway. Pop. of mun. bor. 4,785, and of parl. bor. 6,261 in 1861. The town occupies the ridge of a hill on the S. side of the Chelmer, and consists principally of one long street, running parallel to the river, the E. end of this street forming the portion called 'the Hythe:' two other streets, one from the centre of the town, and the other from its W. end, unite at the bottom of the hill, and extend across the Chelmer into an almost insulated flat called 'Potman's Marshes.' The town-hall is an old building, near the junction of the streets at the W. end of the town, and not far from it is an extensive range of barracks: there is also a small bor. gaol. Maldon had formerly 3 pars.; but 2 of them have been long consolidated. The largest church, that of All Saints, near the town-hall, is an ancient and very large edifice, with a square tower, surmounted by a curious *triangular* spire. St. Mary's is a spacious building, at the lower end of the town, said to have been founded before the Norman Conquest; but the tower and W. end were rebuilt in the reign of Charles I. The united vicarage of All Saints and St. Peter's is in private patronage, the rectory of St. Mary's being in the gift of the dean and chapter of Canterbury. St. Peter's tower is the only part now standing of that disused parish church, and annexed to it is a building formed of the old materials, which has long been used as the depository of a valuable library containing 5,330 volumes, bequeathed to the town, in 1704, by Archdeacon Plume, founder of the Plumian professorship of astronomy in the university of Cambridge: the tower part, which has since been much enlarged, is occupied by the national school, furnishing instruction to about 270 poor children of both sexes. The grammar school, founded in 1621, received an additional endowment from Dr. Plume, who also gave it an exhibition in Christ's College, Cambridge. The estates vested in the hands of trustees yield about 52*l.*, which, after some slight deductions for land tax and repairs, are paid over to the head-master; 6 free scholars receive classical instruction gratis, paying a fee for other branches; and there are, besides these, about 12 pay-scholars. Dr. Plume left also a considerable property for the clothing and instruction of 15 poor boys, and the foundation of a week day lecture in the church; besides which, he built a workhouse, lately sold under the provisions of the Poor-law Amendment Act. There is also a large Lancastrian school, with two or three minor charities and money bequests. The Rom. Catholics, Wesleyan Methodists, and Baptists have their respective places of worship; attached to which, as well as to the churches, are Sunday schools. Among the other public buildings are the public hall, library, and institute, in the Italian style, erected 1860. Maldon is not a manufacturing town; but it carries on a considerable home trade in coal, iron, chalk, and timber, which it exchanges for corn and other farming produce. There belonged to the port, on the 1st Jan. 1864, 99 sailing vessels under 50, and 55 above 50 tons. The customs receipts, in the year 1863, amounted to 262*l.*

Maldon claims to be a bor. by prescription; but its first charter dates as far back as 1155, and was confirmed by Edward I. and subsequent monarchs. The present municipal officers comprise a mayor and 3 other aldermen, with 12 councillors; a commission of the peace is held under a recorder. Maldon has sent 2 mems. to the H. of C. since the reign of Edward I. Down to the Reform Act, the franchise was vested in the resident and non-resident freemen by birth, marriage, servitude, gift, or purchase. The Boundary Act enlarged the limits of the bor. by including in it the parish of Heybridge. Registered electors, 924 in 1865. In cases of succession to burgage tenures, the custom of borough-English prevails here. Markets, well attended, on Saturday; cattle-fairs, September 13 and 14.

MALDONADO, a fortified sea-port town of Uruguay, in S. America, on the N. bank of the Plata, not far from the mouth of the æstuary, and 85 m. E. Monte Video. Its harbour is sheltered from SE. winds by the small island of Gorriti, but it has little depth. Pop. estimated at 5,000. Maldonado is a quiet, forlorn little town, built with the streets running at right angles to

Digitized by Google

each other, and having in the middle a large *plaza* or square, which, from its size, renders the scantiness of the population more evident. It possesses scarcely any trade, the exports being confined to a few hides and live cattle. The inhabs. are chiefly landowners, with a few shopkeepers, and the necessary tradesmen, such as blacksmiths and carpenters, who do nearly all the business for a circuit of 50 miles round. The town is separated from the river by a band of sand hillocks about a mile broad: it is surrounded on all other sides by an open, slightly undulating country, covered by one uniform layer of fine green turf, on which countless herds of cattle, sheep, and horses graze.

MALLOW, an inland town and parl. bor. of Ireland, co. Cork, prov. Munster, on the Blackwater, and on the railway between Cork and Limerick, 18 m. N. by W. the former, and 37 m. S. the latter city. Pop. 4,841 in 1861. Mallow, properly so called, is built on the N. side of the river, being united, by a bridge of 15 arches, to its suburb of Ballydaheen on the S. side of the river. The latter is included in the parl. bor. as fixed by the Boundary Act, which comprises an area of 378 acres. It consists principally of one main and well-built street, nearly parallel to the river; and has a handsome parish church, a Roman Catholic chapel, 2 Methodist chapels, an Independent meeting-house, a court-house, a bridewell, barracks, and infirmary, with commodious baths, a public reading-room, and library. On its W. side are the ruins of its old castle, the property of the lord of the manor. There are two schools, one attended by about 200 boys, and the other by about 130 girls, both under the control of the Board of Education. The town is surrounded by thriving plantations, and is situated in a peculiarly rich and well-cultivated part of the country. Though the river is not navigable, and Mallow has no manufactures, it is yet considered one of the best country towns in Ireland. It is resorted to in summer on account of the mineral waters that it possesses, the properties of which are much the same as those of Clifton, and in the neighbourhood there is a very unusual number of country gentlemen's houses, occupied by families of respectability.

Mallow was incorporated by charter of James I. in 1612, which vested the right of sending 2 mems. to the Irish H. of C. in the provost and 12 burgesses. But this charter fell, in no very long time, into disuse; and, for above a century, the corp. has been extinct, and the right of electing the mems. for the bor. vested, down to the Reform Act, in the *freeholders of the manor*, which comprised 1,126 acres. Since the union, Mallow has sent 1 mem. to the Imperial H. of C.; and the Boundary Act altered the limits of the parl. bor., as already stated, by inc. in it the suburb of Ballydaheen, and exc. the country part of the manor. Reg. electors, 243 in 1865. The bor. has a court leet twice a year, and a court for debts under 2*l.* every third Wednesday. General sessions are held in April, and petty sessions every Tuesday. Markets on Tuesdays and Fridays; fairs on the 1st Jan. (for pigs), Shrove Monday, 11th May, 25th July, and 28th Oct.

MALMEDY, a town of Rhenish Prussia, gov. Aix-la-Chapelle, cap. circ. on the Warge, close to the Belgian frontier, and 20 m. S. Aix-la-Chapelle. Pop. 3,850 in 1861. The town has a noble church, formerly belonging to a rich Benedictine abbey, a fine cabinet of medals and antiques, and is the seat of the council for the circle, a police court, and board of taxation. It has some mineral springs, similar to those at Spa, and manufactures of fine woollen cloth, glue, and soap; but it is chiefly noted for its manufacture of leather for boot soles, with which it supplies a considerable portion of Germany. There are about 50 tanneries in active employment: hides are imported principally from South America, and bark from the forest of Ardennes.

MALMESBURY, a parl. bor., market town, and par. of England, co. Wilts, hund. of same name, on the Avon, 17½ m. NNW. Bath, 86 m. W. London by road, and 85 m. by Great Western railway, *viâ* Minety station. Pop. of parl. bor. 6,881 in 1861. The town, formerly fortified and more extensive, is pleasantly situated on a hill close to the Avon, by which it is nearly encircled, and which is here crossed by six bridges. It consists of three principal streets, two of which running parallel are intersected by the third. In an open space, near the centre of the town, is the market cross, an octangular turreted structure, with flying buttresses, and highly carved, supposed to have been erected in the reign of Henry VIII. The new town-hall, a handsome building, is at Cross Hays. There appear to have been formerly several parish churches in Malmesbury; but it now contains only one besides St. Mary's church at Westport. The Wesleyan Methodists, Baptists, Unitarians, and Moravians have places of worship, and there are three Sunday schools. Two free schools, one of which is conducted on the national system, furnish instruction to poor children of both sexes, and there are two sets of almshouses.

The bor., which is of high antiquity, received its governing charter from William III.; and it was considered too insignificant to be included in the provisions of the Municipal Reform Act. It has sent 2 mems. to the H. of C. from the 23d Edward I.; the franchise, previously to the Reform Act, being in the high steward, alderman, and 12 chief burgesses. The Boundary Act enlarged its limits, by including with it the two out-pars., as above mentioned. Registered electors, 373 in 1865. Markets on Saturday, and a cattle market on the last Tuesday of each month, except March, April, and June. Horse and cattle fairs, March 28, April 28, and June 5.

A nunnery was founded here at the close of the 6th century. Other monasteries were formed here in the two following centuries; and it was a place of considerable and rising consequence as the resort of religious recluses, including, among other establishments, an abbey, which afterwards attained to high celebrity. The Danes destroyed the town at the close of the 9th century; but monastic wealth and the beneficence of princes soon restored its prosperity, which it enjoyed almost without interruption till the Reformation. The chief monument of Malmesbury's departed greatness is its abbey, the entire buildings of which, with the church, covered about 45 acres. Little beyond mere foundation walls is now left except the church, which appears to have been a magnificent structure, and presents some fine specimens of different eras of architecture, but chiefly of the early English. It was cruciform, with a tower rising at the intersection of the transepts, and another at the W. end, the front of which was exquisitely finished and adorned with sculpture, having also a very fine window filled with painted glass. During the civil wars, however, when Malmesbury was repeatedly besieged, both by the Royalists and Parliamentarians, the church, already partly dismantled, suffered great injury; both its towers were battered down, its cloisters demolished, and now only a fourth part of the building is standing; but the ruins are highly interesting, and the S. porch is one of the finest

Digitized by Google

specimens of its kind in England. In the town are several other remains of ancient monastic and ecclesiastical buildings; and about 1 m. from it is a field called Cams-hills, in which are evident vestiges of a Roman encampment.

Malmesbury claims the honour of having given birth to Aldhelm and Johannes Scotus, William of Malmesbury, second only to the Venerable Bede among the early historians of England. Hobbes, eminent by his metaphysical and political speculations, was a native of Malmesbury, where he first saw the light in 1588.

MALMO, a strongly fortified sea-port town of Sweden, cap. the lan. Malmöhus, on the Sound, nearly opposite Copenhagen, and 110 m. SW. Christianstadt, with which it is connected by railway. Pop. 25,526 in 1863. The town is irregularly-built, but has wide streets and a fine market place. It has a citadel, two churches, two hospitals, manufactures of woollen cloth, stockings, prepared skins, carpets, hats, gloves, tobacco, starch, soap, and looking-glasses, and a brisk trade in corn; its port, however, admits only small vessels.

MALO (ST.), a fortified sea-port town of France, dép. Ille-et-Vilaine, cap. arrond., on the British Channel, 40 m. NNW. Rennes, and 200 m. W. by S. Paris, on a short branch of the railway from Paris to Brest. Pop. 10,886 in 1861. The town is built at the mouth of the Rance, on the peninsula of Aron, connected with the mainland by a causeway. It is defended by strong walls with four bastions, constructed by Vauban, and a castle built by Anne, duchess of Brittany. On its N. side it is inaccessible; but, from the want of outworks, it could not hold out against a regular siege. The town is in many parts well built, and has some excellent houses. Its chief public edifices are a cathedral, bishop's palace, town-hall, theatre, hospital, foundling asylum, communal college, and exchange. The port, on the S. side of the town, is commodious and secure, but is rather difficult of entrance, and dries at low water; though at high water springs it has a depth of above 40 ft. In 1836, the French Chamber passed a resolution for the construction here of a floating dock or basin, but it was not completed in 1860, when, by a decree of the Emperor Napoleon III., the sum of 5,000,000 francs was assigned for the final resumption of the work. There is a good roadstead NW. of the town, and opposite the mouth of the Rance, which is defended by various forts; the principal, La Conchée, being constructed on all but inaccessible rock, a considerable distance off shore. St. Malo is the seat of tribunals of primary jurisdiction and commerce, and a board of artillery, and is the residence of various foreign consuls. It has a hydrographical school of the first class, a chamber of manufactures, a royal tobacco factory, naval ropewalks, and dry docks for the building of vessels of various sizes. It has also manufactures of fishing-nets and hooks, pulleys, and other marine fittings; a considerable trade in provisions with the French colonies, a brisk coasting trade, and numerous vessels employed in the mackerel, cod, and whale fisheries. St. Malo has given birth to several distinguished persons; among whom may be mentioned Admiral Duguay de Tronin, Jacques Cartier, Maupertuis, and La Bourdonnaye.

MALPAS, a market town and par. of England, co. Chester, hund. Broxton, 13 m. NNW. Chester, and 153 m. NW. London. Area of par., 25,140 acres: ditto of township, 2,110 acres. Pop. of township 1,037 in 1861. The town, which stands on an eminence near the S. extremity of Cheshire, and on the E. side of the valley of the Dee, comprises 3 tolerably built and well-paved streets. The living is divided into 2 rectories, in the patronage of the Egerton and Drake families. The church (formerly the chapel to a Chiniac monastery), a structure of unhewn stone, consists of a nave and chancel, without either aisle or steeple; it is highly ornamented, and some of its decorations are supposed to belong to the Saxon era. There are also 2 chapels of ease within the par., and several denominations of dissenters have their respective places of worship. A grammar school was founded here in the 17th century; but the free instruction is limited to 6 boys, appointed by Lord Cholmondeley. Alport's school (founded in 1719) has property yielding an income of 119*l.*, and furnishes good plain instruction to boys, girls, and recently, also, to infants, with clothing for 14 boys. The other charities comprise an almshouse for 6 poor women, with an allowance of bread and money: large sums have been left, at different times, for the relief of the poor. Malpas is an agricultural town, and derives its chief importance from its large market for cheese, and its position in the centre of a great dairy farm district. Markets on Monday: cattle and cheese fairs, April 5, July 25, and Dec. 8.

MALPLAQUET, a small village of France, dép. du Nord, 16 m. NNW. Avesnes. Pop. 240 in 1861. This place is celebrated as the scene of one of the bloodiest and most obstinate conflicts of modern times. On the 11th of September, 1709, the allied army, under the Duke of Marlborough and Prince Eugene, attacked the French army under Marshal Villars in their entrenched camp near Malplaquet. The combat was maintained on both sides with undaunted courage and resolution; but in the end the allies succeeded in forcing the entrenchments. The victory, however, was purchased by the sacrifice of above 20,000 men, killed and wounded. Though vanquished, the loss of the French did not exceed half that number, and they effected their retreat in good order. According to Voltaire (*Siècle de Louis* XIV. cap. 21), who derived his information from Marshal Villars, the army of the allies amounted to 80,000, and that of the French to 70,000, though other accounts represent each army as about 100,000 strong; but, whichever be the more correct statement, there are certainly very few, if any, instances of so great a carnage.

MALTA (an. *Melita*), an island of the Mediterranean Sea belonging to Great Britain, 62 m. SSW. Cape Passaro, in Sicily, and 198 m. N. Tripoli, in Africa; Valetta, its port and cap., being in lat. 35° 54′ 6″ N., long. 14° 31′ 10″ E. Extreme length, 17 m.; do. breadth, 9 m.: area, 95 sq. m. Pop. 134,055 in 1861, of whom 131,647 natives; 1,274 British residents, and 1,134 other foreigners. The island is of an irregular oval shape, rising precipitously from the water's edge on the S. and SW. The surface presents the appearance of an inclined plane, sloping gradually from its highest elevation (about 1,200 ft. in the SW.) to the more level land on the NE. side, where it dips into the ocean. The substratum consists of soft calcareous sandstone only scantily covered with soil, great part of which has been carried thither from other countries, or artificially created by breaking the surface of the soft rock into small fragments, which crumble by exposure to the air, and in the course of two or three years become good soil. It has neither lake nor river; and from its geological formation, and the absorbent nature of the soil, has no marshy or swampy ground, except, indeed, two spots of very limited extent at the head of the Great Harbour and St. Paul's Bay, where the sea has receded and left an

Digitized by Google

accumulation of moist soil, from which noxious exhalations have been supposed to emanate. There is no exuberant vegetation, brushwood, or forest; the verdure is scanty, and the greater part of the surface is an arid rock. The climate of Malta, from its being exposed to the winds blowing from the African and Syrian deserts, is unusually hot, especially during summer, when the heat almost equals that experienced in tropical regions. This heat not only lasts during the day, but, owing to the radiation of the caloric absorbed while the sun is up, it continues, with little abatement, throughout the night; so that, by an excess of heat for months together, a feeling is induced among the inhabitants of extreme lassitude and oppression. The medium temperature of the three coolest months (Dec., Jan., and Feb.) is 57⅓° Fah., the maximum 61⅔°, and the minimum 53⅓°; while the medium of the four hot months (June, July, Aug., and Sept.) is 78°, the maximum 82½°, and the minimum 73½°. Frequent showers occur in Sept., increasing in frequency during Oct. and Nov.; but from Dec. to Feb. the rain falls with nearly the same violence as in the tropics, and the atmosphere continues surcharged with moisture till March, when the weather begins to clear; and during the five following months scarcely a drop falls, the sky being generally without a cloud. The most prevalent winds in Malta are from the SE., S., and NW.; the first of which, well known as the *sirocco*, is at once the most prevalent (especially in autumn) and the most disagreeable in its effects on the human frame; neither are there any regular land and sea breezes, as in some southern countries, to modify the temperature. The ordinary rate of mortality is sometimes increased by the prevalence of epidemics, and by plague and cholera, the former of which, in 1813, cut off 4,500 of the inhabitants, being 80 per cent. of those attacked.

Cultivation in Malta is pursued with equal diligence and success. In former times the entire surface was but one mass of barren rock; but continued industry has not only rendered a large part of it capable of tillage, but given it fertility. The rock having first been levelled in terraces, the small particles were pulverised and mixed with soil, while the larger masses were employed in erecting walls to sustain these artificial beds. Soil was also at first brought from Gozzo, and even Sicily; but after a time this was found unnecessary. Owing to this laborious perseverance, Malta is now, on the whole, a fertile island, the cultivated parts yielding annual and often double crops without a fallow, and frequently 80 or 90 fold. Wheat and cotton are the principal products both of Malta and the neighbouring island of Gozzo. The various crops under tillage in Malta alone, in each of the years 1860-62, were as follows:—

Crops	1860	1861	1862
	Acres	Acres	Acres
Wheat	7,904	9,872	8,582
Meschiato	4,014	5,147	5,528
Barley	3,908	3,618	2,396
Beans and other Pulse	3,061	3,497	2,728
Forage	5,073	5,174	4,761
Cotton	4,447	3,688	7,502
Garden	3,992	6,301	3,345
Sesamum	332	231	228
Cumin Seed	930	1,440	1,485
Pasture	1,346	3,216	1,269
Total Number of Acres in Crop	35,007	42,184	37,824
Number of Acres of Uncultivated Land	8,619	8,043	7,897

The inland of Gozzo is still more highly cultivated than Malta. The total number of acres under crop, in 1862, amounted to 9,547, while of uncultivated land there were only 741 acres. Rather more than one-fourth of the cultivated land in Gozzo is under cotton. Both here and in Malta, cotton is sown in May, and gathered before sunrise in Oct., the chief vent for it being in the ports of Trieste, Leghorn, Genoa, and Marseilles. The corn crops suffice for the supply of the inhab. with bread during four or five months a year: the remainder is imported from Sicily and the Black Sea. The grass of the island, called *sulla*, is similar to saintfoin, and some, though small, crops are raised of cummin and aniseed. The vine has been cultivated with some care; but its produce is very inferior, and wine, as well as oil, is imported from Sicily. Figs and oranges are very abundant, and of superb flavour. The Maltese oranges are considered the finest in the world. The season continues upwards of seven months, from Nov. till the middle of June, during which time the trees are covered with an abundance of delicious fruit. Many of them are of the red kind, and these are certainly the best. They are produced from the common orange bud engrafted on the pomegranate stock, and the juice of the fruit is red as blood. Some good springs of fresh water are made available for the purposes of tillage; and numerous large cisterns and aqueducts are constructed for the purposes of irrigation. Still, however, Malta imports the principal necessaries of life. Sicily and Odessa supply her with corn, oil comes from the ports of Italy, and wine from Naples and Sicily; from which latter, also, snow and ice are brought,—no trifling luxuries in an arid climate like that of Malta. Horses and oxen come chiefly from Barbary, but also from Greece and Albania.

Port and Trade.—The central position, excellent port, and great strength of Malta, make it an admirable naval station for the repair and accommodation of the men-of-war and merchant ships frequenting the Mediterranean, and render its possession of material importance to Great Britain. It is also of considerable consequence, particularly during war, as a commercial *dépôt*, where goods may be safely warehoused, and from which they may be sent, when opportunity offers, to any of the ports belonging to the surrounding countries. Malta likewise presents unusual facilities for becoming the *entrepôt* of the corn trade of the Mediterranean and Black Seas. Her *caricatori* for corn are, like those of Sicily and Barbary, excavated in the rock, and are, perhaps, the best fitted of any in Europe for the safe keeping of grain. The harbour of Valetta, which lies on the NE. side of the island, is divided into two sections by a promontory or tongue of land on which stands the cap., defended by the castle of St. Elmo. The SE. side, called the Grand Port, is the most frequented, having an entrance about 250 fathoms in width, with an average depth of 10 or 12 fathoms: it runs inwards about 1¾ m., has deep water and excellent anchorage throughout, the largest men-of-war coming close up to the quays. NW. Fort St. Elmo is Port Marsamusceit, which is also a noble harbour, used exclusively by ships performing quarantine: near its centre is an island on which are built a castle and lazaretto. The custom-house and storehouses are in the Grand Port, and furnish every facility for landing and warehousing goods. There is an excellent dockyard, victualling office, and hospital for the use of the navy.

The subjoined table shows the quantities and value of the total exports of Malta in the year 1862:—

Digitized by Google

Exports		Quantities	Value
Grain:			£
Wheat	salme	1,308,057	2,485,309
Indian Corn	,,	91,549	105,281
Barley	,,	179,918	161,926
Manufactured	cantara	19,525	27,288
Oil	caffisi	45,481	38,659
Pulse	salme	68,930	89,609
Spirits	barili	10,371	18,667
Wine (Inferior)	,,	18,934	16,094
Total	..	..	2,990,558

The total value of the imports, in 1862, amounted to 3,697,574*l.* The exports, in 1863, were of the value of 2,420,131*l.*, and the imports of 3,087,593*l.*

The vessels of the island, which rank among the best in the Mediterranean, are built with oak timber from Dalmatia: the Maltese are diligent, expert shipwrights; and their wages being moderate, Valetta is a favourable place for careening. Owing, however, to the want of a dry dock, all ships, above the size of a sloop-of-war, requiring to have their bottoms examined, are obliged to come to England for that purpose. The articles of export are shown in the preceding table. The imports comprise manufactured goods (chiefly from Great Britain), colonial produce, wheat from Sicily and the Black Sea, wine and spirits, tobacco, and salt-fish, with numerous minor articles.

Malta has, within the last thirty years, become the centre of a very extensive steam-packet system, the steamers from and to England, the Ionian Islands, and Alexandria, touching here. The French steamers between Marseilles, Alexandria, and other parts of the Levant, usually perform quarantine at Malta. The industry of the island comprises the manufacture of cotton fabrics, the annual value of which may amount to from 70,000*l.* to 90,000*l.* Cabinet-work is made for exportation to Greece and the Ionian Islands; soap, leather, macaroni, and iron bedsteads are made on a smaller scale; and the Maltese goldsmiths are remarkable for the elegance of their gold filagree-work, the exports of which are valued at about 7,000*l.* a year. The currency of Malta consists partly of British silver and copper, introduced in 1825, but partly also of Maltese scudi of the value of 1*s.* 8*d.* English, of Spanish dollars valued at 4*s.* 4*d.*, and of Sicilian dollars at 4*s.* 2*d.* each. The weights most in use are the *rottolo* or pound = 12,216 English grains, and the *cantaro*, comprising 100 rottoli or 147½ lbs. avoird. Corn is measured by the *salma* = 8·221 Winchester bushels, and oil is sold by the *cafiso*, which contains 5½ English gallons. Bills on London are usually drawn at 30 and 60 days' sight; and the deputy commissary-general must, at all times, grant bills on the treasury of Great Britain for British silver tendered to him, at the rate of the 100*l.* bill for every 101*l.* 10*s.* silver, receiving the silver of other countries at a fluctuating rate of exchange. Any person may establish himself as a merchant, and numerous Englishmen, Frenchmen, and Sicilians carry on an extensive commerce; while among the native traders, perhaps the wealthiest of all are those who speculate in articles of consumption for the island, buying a great variety of goods, in small quantities, for ready money, and realising large returns by retail as well as wholesale trade.

Government.—The government is administered by a governor, who is assisted by a council of government, constituted by letters patent of 11th May, 1849, consisting of 18 members—10 official and 8 elected, who are returned by about 3,300 electors. The governor is president. An income of 8*l.* from immovable property, or fragments of a rent of 41*l.* per annum qualifies a person to vote. The principal administrative departments are the chief secretary's office, quarantine department, custom-house, land-revenue department, and audit office. There are numerous courts of justice, in all of which the procedure is both intricate and expensive; besides which, the laws themselves are frequently contradictory, and generally require revision. The public revenue and expenditure were as follows in each of the eight years 1856 to 1863:—

Years	Revenue	Expenditure
	£	£
1856	144,795	129,776
1857	132,682	134,443
1858	142,383	129,781
1859	147,385	147,730
1860	145,944	148,303
1861	144,234	172,523
1862	153,806	148,672
1863	157,831	163,073

The chief sources of revenue are rents of government property, customs and quarantine dues, and internal taxes; and the expenditure comprises not only the salaries of the various government officers, but the expenses attending the maintenance of the public roads, as well as liberal contributions for the support of schools and public charities. The military force of Malta consists almost entirely of British troops, varying between 2,000 and 2,500 men. There is also an engineer and artillery corps, the entire maintenance of which, as well as of the army generally, falls on England. There is likewise a native regiment, comprising about 500 men, called the Malta Fencibles; but their duties being exclusively local, and rather of a civil than military nature, the maintenance of this body is defrayed out of the revenues of the island.

Religion and Education.—The national religion of the Maltese (secured by the English government) is Roman Catholic, to which the people are strongly attached, scrupulously observing its rites, and celebrating its festivals; but, notwithstanding their sincere adherence to the church of Rome, they entertain little or no jealousy of the Protestants: both parties observe the greatest moderation and deference for the religious opinions of each other. There are in all no fewer than 1,000 Rom. Cath. clergymen, the church property producing about one-fourth part the rental of the island. The Protestant places of worship comprise the governor's chapel, naval chapel, church missionary chapel, and Wesleyan mission chapel; besides which there is a church at Valetta, for the exclusive use of the English garrison. The total number of Protestants does not, however, exceed 5,000. Education till recently has been much neglected; but within the last thirty or forty years several new schools have been established, the principal being the Normal free schools at Valetta, Senglea, Notabile, in Malta, and Rabato in Gozzo. Other primary schools are scattered through the villages, and there are about 80 private schools. The university of Valetta, founded in 1771 by the grand master, Pinto, and now occupying the convent of the suppressed Jesuits, is supported by the government at an expense of between 1,000*l.* and 1,200*l.* a year. The bishop has an ecclesiastical seminary at Notabile, giving religious instruction to about 50 boys. Instruction is commonly conveyed in these schools in the Italian language, the mother-tongue of the Maltese (a *patois* of Arabic, mixed with a little Ita-

Digitized by Google

lian), being wholly unwritten, and never applied to the purposes of literature. English is spoken by many of the higher classes, and is making considerable progress even among the lower orders in the cities. In the rural districts, however, Maltese is spoken almost without exception.

Manners of the People.—The Maltese are as dark as the natives of Barbary, but without the Arab features, the men being of middle height but erect stature, robust and active: while the women, though small, and of dark complexions, are graceful, with regular and sometimes handsome features. The working classes are described as laborious and frugal, living on very slender fare, the great bulk of them being employed either in agricultural labour, or quarrying and cutting stone for exportation to Constantinople and Alexandria. The Maltese are celebrated all over the Mediterranean for their good and intrepid seamanship. The dress of the higher orders is similar to that of other Europeans: but, among the inferior or working classes, the dress of the men is a short loose waistcoat, covering a cotton shirt; short loose trowsers leave the leg bare from the knee; and on the feet are worn *korchs*, a kind of sandals, nearly resembling those of the ancient Romans. The women wear short cotton shifts, blue striped petticoats, corsets with sleeves, and a loose jacket covering the whole. A black veil, called the *faldetta*, is the out-of-doors head-dress of the women; whereas the men wear woollen caps in winter and straw hats during summer. The morals of all classes are much higher than in most parts of S. Europe; and if there be less refinement of manners in the Maltese than among their continental neighbours, there is less vindictiveness and intrigue, while drunkenness and gambling are almost unknown. A few of the aristocratic families, ennobled by the knights of Malta, yet remain; but they form a very small portion of the population, and few of them possess large property.

Cities and Towns.—The principal towns are Valetta, built in 1566, by the famous grand master, John de Valetta, as being more conveniently situated for a cap. than the old inland city called Citta Vecchia, the former cap. of the island, and identical with the ancient Melita. Valetta, on the NE. coast, in the centre of a fine double harbour, in lat. 35° 54′ 6″ N., long. 14° 31′ 10″, has a pop. incl. the garrison and its suburb, Vittoriosa (on the SE. side of the great harbour), of about 60,000. It is very strongly fortified, and from its position on a hill, as well as the almost impregnable works and trenches that surround it, has a most imposing appearance; nor is the visitor less struck with its internal beauty. The streets, though generally steep, are wide and well paved with lava, while the public squares and quays along the harbour are of noble proportions, indicative of the former wealth of the knights of Malta. The governor's palace and gardens, lying outside the walls, were formerly occupied by the grand-master: a public library (once belonging to the order) contains upwards of 40,000 vols.; and the general hospital is not only used for the reception of sick troops, but has ample room for stores and other purposes: the Floriana Hospital is also a large building, occupying two sides of a quadrangle; and in the suburb of Vittoriosa is a third military hospital. Other hospitals are open for the relief of the native sick, and among the other public buildings may be mentioned the barracks, prison, theatre, university, collegiate church of St. John, and nineteen other churches, including those in the suburbs. Valetta has a bustling animated appearance, from its being the great centre of the industry and commerce of Malta. Citta Vecchia stands on very high ground, overlooking nearly the whole island, about 7 m. W. of Valetta. The rock on which it is built is excavated into large catacombs, some of which are said to extend 15 m. underground. This old and decayed city is strongly fortified, and the cathedral is an extremely large and lofty structure: underneath is a grotto in which, as the monks inform us, St. Paul concealed himself for some time after his shipwreck. They have equally authentic legends respecting other localities close to the city. The so-called towns are mere villages, besides which there are about forty hamlets, chiefly remarkable for their picturesque and well-built churches. The roads, generally speaking, are good, many of them having been recently much improved; but the inland transport is, notwithstanding, chiefly by horses, mules, and asses.

Neighbouring Islands.—About 4½ m. W. of Malta is the small island of Gozzo. It produces considerable quantities of cotton, the cultivation of which constitutes the chief occupation of the islanders, who differ in no essential respect from the Maltese. An English garrison is stationed at Chambray, a strong fort elevated about 500 ft. above the sea, and there are other military works well adapted for the defence of the island. Between Gozzo and Malta is another, though very small island, called Cumino, which belongs to a single proprietor, who derives from it the title of a prince palatine.

History.—Malta was probably first discovered by the Phœnicians, who communicated to the Greeks its oldest known appellation of Ὀγυγία From the Phœnicians it passed to the Carthaginians, from whom it was taken by the Romans in the first Punic war, and made a prefecture subject to the prætor of Sicily. St. Paul, during his voyage from Palestine to Rome, was wrecked here; and, being kindly received by the people, performed some miraculous cures, which made him be 'honoured with many honours, and, when he departed, laden with such things as were necessary.' (Acts xxvii. 39–44, xxviii. 1–10.) On the decline of the Roman empire, Malta fell under the dominion of the Goths, and afterwards of the Saracens. It was subject to the crown of Sicily from 1190 till 1525, when the emperor Charles V. conferred it on the knights hospitallers of St. John of Jerusalem, who had a short while previously been expelled from Rhodes, giving them power to levy taxes, import duties, &c., for the maintenance of the order, on condition that they should wage perpetual war against the Turks and Corsairs. It was besieged by a powerful Turkish armament for 4 months, in 1565, but without success; the knights, under their heroic grand master, John de Valette, founder of the city called by his name, having succeeded in repelling all their attacks, and compelling them in the end to retreat with vast loss. During more than 150 years, the island maintained itself against the Ottoman power; but the order was never sufficiently wealthy to attempt foreign conquests, or equip numerous fleets. At length, however, the inexpediency of the continuance of the piratical contests, in which the knights had been so long engaged, became obvious; and, in 1724, they concluded a truce with the Turks, which secured for the Maltese in Turkey the same privileges as the French. The subsequent history of Malta till its surrender to the French has little worthy of notice. In 1798, a French fleet of 18 ships of the line, with 18 frigates and 400 transports, arrived off Valetta, having Napoleon on board; and the

Digitized by Google

treachery of the French knights, who desired to be the subjects of France rather than Russia, rendered the capture of the island, with its cap., no very tedious or difficult task; and accordingly, after some fighting, the island capitulated 12th July, 1798, one month after the arrival of the fleet, when the Order of Malta was virtually extinguished. In consequence of the irreligious practices and oppressions of the French, the Maltese rose *en masse* to expel them; and compelled them to take refuge in the towns, where they were closely blockaded for upwards of two years. At length, the French, being reduced to extremities, surrendered on the 5th September, 1800. The English immediately took military possession of Valetta, and have since retained it; the treaty of Paris, in 1814, having definitively annexed it to the crown of Great Britain.

MALTON (NEW), a parl. bor., market town, and par. of England, N. riding, co. York, wap. Ryedale, on the Derwent, 16 m. NE. York, 181 m. N. by W. London, by road, and 213 m. by North Eastern railway. Pop. of bor. 8,072 in 1861. Area of parl. bor., which comprises the pars. of St. Leonard and St. Michael in New Malton, with the pars. of Old Malton and Norton, 6,640 acres. The town, which occupies an eminence on the W. bank of the river, is very irregularly laid out; but the buildings, chiefly of stone, are improving in quality: on the opposite side of the Derwent, crossed here by an ancient bridge, shaped somewhat like an inverted Y, is the suburb of Norton in the E. Riding, a thriving and increasing place; and about 1 m. NE. of the town is the village of Old Malton, formerly of some consequence, but now exhibiting all the symptoms of decay. The town-hall, corn exchange, theatre, and workhouse, are handsome modern buildings; and near the bridge stand the remains of a castle, built by the Vesci family, and destroyed by Henry II. There are two churches, one of which is surmounted by a tall unfinished spire: the livings are curacies, dependent on Old Malton, and in the gift of Earl Fitzwilliam. The Wesleyan Methodists, Presbyterians, and the Society of Friends have their respective places of worship; and there are several well attended Sunday schools. New Malton has subscription schools for children of both sexes; but the grammar-school, founded by Archbishop Holgate, is at Old Malton. The Derwent being navigable up to New Malton bridge, is made available for the shipment of large quantities of corn, hams, bacon, and other farm produce. Malting and tanning are carried on to a considerable extent, and there are two large porter breweries; but the chief dependence of the town is on its retail trade with the opulent gentry of the neighbourhood.

New Malton is a bor. by prescription, governed by a bailiff. It has returned 2 mems. to the H. of C. since the 23rd Edward I. Previously to the Reform Act, the franchise was vested in the burgage holders and inhabs. rated to church and poor. The limits of the bor. were enlarged by the Boundary Act so as to include the entire pars. of New Malton, and the pars. of Old Malton and Norton. Registered electors, 605 in 1865. New Malton is also one of the polling places at elections for the N. Riding; and the petty sessions are held here for the E. div. of wap. Ryedale. Markets on Tuesday and Saturday, but chiefly on the latter for horses and cattle, corn, bacon, and farming implements. Very large cattle fairs, Monday before Easter, day before Whitsunday, and Oct. 11.

MALVERN, GREAT, a town, par., and celebrated watering-place of England, co. Worcester, hund. Pershore, 7½ m. SSW. Worcester, and 104 m. WNW. London. Area of par. 5,020 acres. Pop. of town, 4,484 in 1861. The town, which for many years has been a place of fashionable resort, in consequence of its delightful situation in

> 'The vale of Severn, Nature's garden wide,
> By the blue steeps of distant Malvern wall'd,
> Solemnly vast' . . . . Dyer's Fleece.

stands on the E. declivity of the well-known hills bearing its name, and is neat and well built, comprising, besides good houses for the tradespeople, several splendid hotels and substantial private residences for visitors. The church, a fine cruciform structure of Anglo-Norman and pointed architecture, is 171 ft. in length, with an embattled and pinnacled tower rising 124 ft. above the intersection of the nave and transepts. It formerly belonged to a Benedictine monastery, founded here in 1083, and long one of the wealthiest and most important religious establishments in England. At the dissolution of the monasteries, when the rest of the property was sold, the church was bought by the inhabitants and made parochial. Malvern has long been noted for two medicinal springs, the chief of which (St. Anne's well) is bituminous, and enjoys a good reputation for the cure of nervous and cutaneous diseases: the other is a simple chalybeate, and little frequented.

About 3 m. S. is the village of Little Malvern, the road to which skirts the Malvern Hills, an extensive range composed of greenstone and quartz covered in parts with blue limestone, and running from N. to S. about 10 m., with an average breadth of 3 m. The acclivities in many parts are very gentle; but the summit of the ridge, which attains a height of 1,444 ft., commands magnificent views over Wales and the cos. of Hereford, Worcester, and Gloucester.

MALWAH, a prov. of Hindostan, chiefly between lat. 22° and 26° N., and long. 74° and 80° E., having N. Rajpootana and Agra, W. Gujrat, E. Allahabad, and S. Gundwanah and Candeish, from which it is separated by the Nerbuddah. The central part of this prov. is a table-land, extending from the Vindhyan mountains on the S. to the Chittore and Mokundra ranges on the N., and E. and W. from Bhopaul to Dohud; but which seldom rises to more than 2,000 ft. above the sea. It declines gently towards the N., in which direction flow most of the principal rivers, as the Chumbul, and its chief affluents, the Kali-Sind and Betwah, tributaries of the Jumna, and the Mhye, which falls into the Gulf of Cambay. The climate is usually mild and salubrious, except for about two months after the rains, when fevers are very prevalent. The total fall of rain from June to September has been estimated at 50 inches. The soil consists either of a loose black loam, or a more compact ferruginous mould, both noted for their fertility. Wheat, grain, pease, jowaree, bajree, mung, and maize are among the chief grains cultivated; the first two furnishing the largest export. Rice is raised only in small quantities sufficient for home consumption; but opium, sugar, tobacco, cotton, linseed, garlic, turmeric, and ginger are grown to a considerable extent. A little indigo, and the root of the *Morinda citrifolia*, which supplies a red dye, are also raised, and fruits, including grapes, flourish in great abundance.

Opium is by far the most valuable product of Malwah, the soil and climate of which appears singularly well adapted for the cultivation of the poppy. The Malwah opium is considered by the Chinese, for whose consumption it is chiefly grown,

Digitized by Google

superior in strength, in the proportion of 7 to 5, to that of Bahar and Benares, though inferior in flavour. In Malwah the culture of opium is freely carried on; the cultivator paying a proportionally heavy land-tax for the land occupied in its culture. Previously to 1830, the Bombay government endeavoured to obtain a monopoly of the sale of opium exported from the ports under that presidency, but with little success; for 2-3rds of the Malwah produce were carried to the Portuguese settlement of Damaun and elsewhere, to be exported. But, at the above period, the attempted monopoly was abandoned, and a permit, or transit-duty, similar to that imposed in other states through which the opium passes, was laid on in its stead. Since then 9-10ths of the Malwah opium have been shipped at Bombay. The tobacco of the prov., especially that of the Bilsah district, is also, beyond all comparison, the best in Hindostan.

Malwah is the chief seat of the Bheel race, as it was of the Pindarry and Mahratta powers. It is almost wholly divided among the dominions of native princes, the chief of whom are Scindia, Holkar, and the rajahs of Bhopaul and Kotah. Except the Maharajah of the Punjab, Scindia is the only prince in Hindostan who can be called independent of British authority; but his independence has more of semblance than reality, for the power of his dynasty has been completely broken by a succession of reverses: his dominions are surrounded by the territory of the British, or their allies, who are bound to negotiate with foreign states only through the intervention of the British. The chief cities belonging to Scindia are, Gwalior, his modern, and Oojein, his ancient cap.

MAMERS, a town of France, dép. Sarthe, cap. arrond., 24 m. NNE. Le Mans. Pop. 5,839 in 1861. The town is indifferently built, but has of late been greatly improved. It is a town of great antiquity, and was surrounded with entrenchments by the Normans, some remains of which are called the 'fossés du Robert le Diable.' It has a handsome Gothic parish church, a college, a prison, some public baths, a theatre, manufactures of hempen, cotton, and woollen fabrics, and several tanneries and breweries.

MAN, ISLE OF (an. *Mona*, *Monapia*, or *Monæda*), an island belonging to the United Kingdom, in the Irish Sea; between lat. 54° 4′ and 54° 27′ N., and long. 4° 17′ and 4° 34′ W.; its NE. extremity (the Point of Ayre), being 17 m. from Burrow-head, in Wigtownshire, its E. coast 34 m. from St. Bee's Head, in Cumberland, and the town of Peel, on its W. side, 30 m. from Ballyquintin Point, in Ireland: greatest length, 35 m.; greatest breadth, about 13 m. Area, 280 sq. m., exclusive of the Calf-of-Man, a small disjointed fragment of the island, at its S. extremity. Pop. 52,469 in 1861. Its general aspect, as viewed from the sea, is bold and precipitous; a ridge of mountains runs through its whole length, and three of the highest points reach an elevation of more than 1,600 ft. above the sea; Snafield, the loftiest, being 2,004 ft. high. Several rills and streams flow from the high ground in different directions; but there are no rivers nor lakes of any considerable size. The prevailing feature in the geology of the island is clay-slate, interspersed with mica-slate; and covered, near the coast, with grauwacké and old red sandstone. Limestone also is found on the S. side, near Castleton, intersected in some parts by veins of trap. The clay-slate is quarried at a place called Spanish-head, near Castleton; and stones are raised in blocks averaging about 7 ft. in length by 1 ft. in breadth, and 6 inches in thickness. Drawing and roofing slates are quarried on the W. side of the island, not far from Peel. Close to Castleton, on the shore, are limestone and marble quarries, which have been worked for many years, and furnished a part of the stone for St. Paul's Cathedral, London. The island also produces lead, zinc, and copper. But mining and quarrying are in a very depressed state; the tools employed are of the rudest description; and, until recently, not even a common crane was to be seen in the quarries.

The climate of Man is considered milder during winter than that of the adjacent parts of Great Britain and Ireland. Frost and snow are rare; and, when they do occur, they are seldom of long continuance. Owing, however, to the frequency of fogs and dews, as well as to the prevalence of E. winds, during many weeks of spring, the summers are deficient in heat, and the harvest is generally rather late. The climate however is, on the whole, favourable to health: cases of longevity are frequent, epidemics rare, and agues unknown. The soil is extremely various. Clay and marl, covered with white sand, predominate in the N. and NW. extremity of the island, which is covered with scanty herbage, affording sheep pasture; but, proceeding S. and E., the quality of the soil improves, and, in the valleys especially, are some tracts, partly sand and loam, and partly stiff clay. No part of Man is, however, very productive; nor are any great pains taken to improve its natural resources. The mountains, commons, and other waste lands include about 54,000 acres, leaving above 100,000 acres for tillage. Agriculture has considerably improved since the diminution of the herring fishery has made the men turn their attention to farming, which used to be exclusively the occupation of women: wheat, barley, and potatoes are raised in sufficient quantities for exportation, and within the last few years the turnip husbandry has been introduced with some success by the English and Scotch settlers. The implements, however, are very rude; and the division of land into small farms has combined with the herring fisheries and smuggling to retard improvement. Peas are cultivated in the N. parts, clover is a favourite crop, and flax is raised by almost all the farmers for domestic use. The cattle of Man, which at present consist of a mixture of Irish and British breeds, are small and short-horned, running to fat, and not yielding milk till they are six years old. Ayrshire cows have, however, been introduced with much advantage. The native sheep, which are small, hardy, and usually of a white or grey colour, are slow feeders, long in coming to maturity, and very coarse-woolled: they are now, however, confined to the hills, the lowlands being mostly stocked with improved breeds. The island yields a race of hardy ponies, capable of much labour, and requiring little food; but for draught and farming purposes other breeds, chiefly Irish, have been imported of larger size and strength. Man had formerly a peculiar breed of hogs, now totally extinct, the animals at the present day being of various kinds, some of which resemble the Chinese variety. Red-deer formerly ranged in the mountains; but the game at present consists of hares, rabbits, partridges, snipes, and woodcocks. Foxes and polecats are not found, neither are there any poisonous animals on the island; but weasels and rats are very numerous, and detrimental to the farmers.

The Manks tenures are remarkable: the different pars. are divided into *treens*, each comprising 4 quarterlands, varying in size from 60 to 150 acres, and rising in yearly value from 10*l.* to 125*l.*: there are 760 quarterlands, and they are esteemed

Digitized by Google

by the islanders as property of the highest nature, in fact strictly entailed estates. Other lands, called *intacks* and cottages, are devisable by will, and on the whole considered to be of a far inferior nature. The yeomen are very proud of these little freeholds, which range from 10 to 200 acres, and usually comprise portions of pasture as well as arable land; 'but there can be no doubt,' says Lord Teignmouth, 'that the system is practically vicious, diminishing the wealth both of the farmers themselves and of the public at large, containing indeed within itself the seeds of its own dissolution.' (Sketches of Scotland and the Isle of Man, vol. ii. p. 202.) Most of the yeomen have large and expensive families, which the law of Man compels them not only to rear and educate, but to provide for; and hence their estates soon become encumbered, and they are effectually prevented from pursuing any improved system of management, even if they felt inclined to its adoption, which is seldom the case; there being no more obstinate adherents to routine and ancient practices than the Manx husbandmen. Many of them thus become involved in debt, and mortgage their property, the redemption of which being seldom in their power, they are dispossessed of it, and compelled to leave the island, or to resort to trade or predial labour. Hence the class of small proprietors is gradually disappearing: numbers of them having been swallowed up in the extending estates of the Scotch and English residents.

Man used to be one of the principal seats of the herring-fishery; but for several years past it has been comparatively deserted by the herring-shoals, and the fishery has, in consequence, become quite inconsiderable, though even now it is the frequent practice of the farmers to purchase a boat, and share in the excitement and profit of the season. This diminution, however, is not to be regretted, as the fishery was carried on from July to October, exactly when the services of the yeomen and others engaged in it, were most necessary at home. Being also a kind of lottery, in which, by a few weeks' labour, large sums were occasionally realised, it attracted crowds of adventurers, without either capital or skill; while the irregular life led during these pursuits tended to encourage intemperance, and was a main cause of the indolence for which the Manx have been long notorious. There has, in fact, been a material improvement in the habits and industry of the people since the decline of the fishery; and there are, perhaps, few things less to be desired for the island than its revival. The herrings appear off the coast of Man in June, remaining till September, when they seek the E. coast of Ireland to deposit their spawn. The fishing vessels now built are much larger than formerly; they are half-decked, with very short keels, and are good sea-boats, though apt to pitch to a dangerous extent in rough weather: they vary from 18 to 30 tons burthen, and are manned by 8 or 10, and sometimes 12 men. Cornish, Welsh, and Irish fishers also visit Man. The cod-fishery has been neglected, owing to the want of adequate capital for the supply of proper vessels and lines.

The manufactures are chiefly domestic, and carried on by women, most of whom, when not in the field or farmyard, are employed at their looms or spinning-wheels, producing woollen, linen, and cotton cloths, both for the home and foreign supply, as well as nets for the use of the fisheries. Bleaching is conducted on a large scale in Laxey Glen, stuffs being sent thither from all parts of the island. A woollen manufactory is established at Douglas; and hats, made of coarse wool, which cost about 2*s.*, are said to wear extremely well. The exports consist principally of corn, potatoes, eggs, lime, and limestone, lead and copper ore, herrings, linen, sail-cloth, and paper. On the 1st of January, 1864, there belonged to the island 278 sailing vessels under 50, and 49 above 50 tons, the former of a total burthen of 6,817 and the latter of 4,161 tons. There were, besides, 3 steamers, of 839 tons burthen.

The condition of the labouring pop. is moderately prosperous. There is no legal provision for the poor, who have to depend wholly on voluntary charity. Generally speaking, the cottages are of a very inferior description: they are frequently built of earth or sod, and thatched with straw, having a funnel of sail-cloth, as a substitute for a chimney. There are, however, a few improved cottages, and their number will, no doubt, increase with the spread of improvement.

The feudal sovereignty of Man, which was a *kingdom* prior to 1504, was held by the Stanleys, afterwards earls of Derby, and their successors, the dukes of Atholl, from 1426 to 1765, when parliament, conscious of the injury which the revenue and the public generally received from the contiguity of an island only feudally subject to the crown, and hence affording refuge to debtors, outlaws, and smugglers, purchased from the duke of Atholl for 70,000*l.*, his civil and military rights and patronage, but with certain reservations as to fiscal matters and titular dignity. A further arrangement was made in 1826, and Great Britain now enjoys all the rights and privileges of sovereign of the island. The constitution, however, was left untouched; and for many years the legislative power has been vested in the House of Keys, a body comprising 24 members, now self-elected, but formerly chosen by the statesmen or owners of entailed estates. Their acts are binding in all cases, and the laws are so few and brief as to admit of being included in a small volume. Attorneys occasionally plead in the courts; but the suitors quite as frequently defend their causes in person: law is cheap, and, as was to be expected, litigation is very common. There are two supreme judges in the island called *deemsters*, or 'awarders of the law,' officers of high antiquity, and exercising jurisdiction over all civil and criminal cases; being the presidents (under the crown and governor) of the two courts of chancery and exchequer, each of which is held eight times a year. The former of these has little more to do than to confirm or annul the decisions of the deemsters, who hold a primary court of judicature; and the exclusive business of the latter is to punish offences against the revenue laws. The common-law courts are held at different places for the 6 different *sheadings* into which the island is divided, and may be considered as courts of 'common pleas,' in which all actions, personal or real, may be tried, as in the deemsters' court, by a jury of 6 in real, or of 4 in personal actions. The appeals from this court are first to the House of Keys, afterwards to the governor, and finally to the Queen's Privy Council. A half-yearly gaol-delivery is made compulsory, and bailiffs act in the five chief towns to hear and determine cases of debt under 40*s.*

The established religion is that of the Church of England; all sects, however, enjoy full toleration. The clergy are under the bishop of Sodor and Man, suffragan to the archbishop of York, but holding no English barony, and hence having no voice in the legislature, though privileged to sit in the House of Lords. This see has been held by several highly celebrated divines; and, among others, by Barrow, Wilson, and Ward. An ecclesiastical court is held twice a year, either by the bishop or his vicars-general, and an archdeacon regulates

Digitized by Google

the fabrics and minor concerns of the 17 parishes. These cures are commonly well attended to by respectable clergymen, but their stipends do not average 90*l.* a year; and the churches, though externally pretty, are deficient in accommodation. The dissenters have made considerable progress in the present century; but the Methodists comprise even now only one-eighth of the pop., and the other bodies of dissenters are unimportant. Bishop Wilson and other prelates have done much to promote education, not only by establishing schools, but also by translating the Scriptures and other books into the Manx language. Each parish has its school more or less richly endowed; and while elementary instruction is given in the Manx, every endeavour is made to instruct the natives in the English language. Indeed there can be no doubt that, at no distant period, the pop. will be familiarly acquainted with the English language, which will be the surest method to disabuse them of the prejudices which so many entertain against a union with England.

The Manx, like the Welsh, and Scotch Highlanders, belong to the great Celtic family, which probably occupied the whole United Kingdom previously to the immigration of the Belgæ. Their Celtic origin is clearly evinced by their language, which is a mere dialect of the Irish, Erse or Gaelic. They have a swarthy complexion, stout, with an air of melancholy pervading their countenances. Indolence, and a love of litigation, are distinguishing characteristics of the male part of the pop. Even, at present, workmen rest for two hours in the middle of the day, when they may be seen stretched under hedge-rows by the roadsides. The women, however, are extremely industrious; and on them devolve not only the production of domestic manufactures, but also a large share of the labours of agriculture. They are hospitable, superstitiously attached to existing institutions and religious forms, and treat bishops and clergymen as beings of an exalted nature; but they are, notwithstanding, drunken, indelicate, dirty, and addicted to pilfering. Their old habits and prejudices are now, however, gradually giving way; the increasing influx of visitors, during the summer season, having, in this respect, effected an important and beneficial change. The *élite* of society is composed of the government officers and the large landowners, with a few church dignitaries; the other clergy, the attorneys, and medical men being too poor to mingle with the first circle.

The rocky islet, or Calf of Man, already alluded to, at the S. extremity of the island, was formerly the resort of vast numbers of puffins (*Procellaria Puffinus*, Lath.). At present, however, the bird is there entirely unknown. It was supposed to have been driven from this favourite haunt by the too great destruction of its young. These were held in considerable estimation; and Pennant mentions that, in his day, great numbers of them were taken every year by the person who farmed the islet. It appears, however, that rats that had escaped from a vessel wrecked on the coast, were the real exterminators of the birds. (Quayle's Survey, p. 8.)

The early history of Man is obscure. It was the Mona of Cæsar, and the Monapia of Pliny; but little more is known beyond mere traditions of its being held by the Druids, and subsequently by Norwegian monarchs, till, in 1264, it was purchased by Alexander III. of Scotland, who appointed a viceroy, and made it tributary. The Scotch were soon afterwards expelled by the English, but the power of the latter was not established till the reign of Henry IV., who granted it to the Percys, from whom it fell, by attainder, and thence passed by gift of the same monarch to the Stanley family, by whose heirs it was sold to the British crown.

The chief towns of Man are: 1. Castleton, in which is the college above mentioned, the seat of legislature, and the residence of the governor: pop. 2,373 in 1861. 2. Douglas, the chief trading town, with 12,511 inhab. 3. Peel, formerly celebrated both as the residence of the earls of Derby and the cap. of the kingdom, but now decayed, and having only a pop. of 2,848 in 1861, or about the same as that of Ramsey, one of the steam-packet stations between Liverpool and Glasgow, on the NE. side of the island.

MANAAR (GULF OF), an inlet of the Indian Ocean, dividing Ceylon from the S. extremity of Hindostan; extending between lat. 7° 30′ and 9° N., and long. 78° and 80° E. It is in general too shallow to be navigated by vessels above the size of sloops, and is separated by the islands Ramissiram and Manaar, and the chain of rocky islands and sandbanks called Adam's Bridge, from another inlet of the sea called Palk's Strait, also between Ceylon and the continent. The Island of Manaar is 18 m. in length, by 2½ m. broad; but has little importance of any kind. For further particulars, see CEYLON.

MANCHA (LA), a former prov. of Spain, now called Ciudad Real, in the S. part of New Castile, bounded S. by Granada, E. by Cuença and Murcia, and W. by Estremadura. Area about 7,500 sq. m. Pop. 244,328 in 1857. The district consists chiefly of lofty and barren plains, upwards of 2,000 ft. above the sea, and is, without exception, the least picturesque and productive in the whole peninsula. But it produces corn, wine, olives, and saffron: the Val-de-Peñas, a light red wine, is highly esteemed all over Spain. The mules of this prov., also, are the largest and strongest in the peninsula. La Mancha, however, derives its chief celebrity from the inimitable work of Cervantes; and many of the customs he has depicted are still prevalent in the province. The cap. is Ciudad Real, once a flourishing city, but now decayed, with a pop. of only 10,159 at the census of 1857.

MANCHA (REAL), a town of Spain, in Andalusia, prov. Jaen, 8 m. E. the city of Jaen. Pop. 5,115 in 1857. The town is situated in a spacious plain, and comprises some regular-built streets and handsome squares; its chief buildings being a par. church, Carmelite convent, and hospital. Woollen and linen cloths, bedticks, and sacking are made here, with bricks and tiles in large quantities, for the supply of the prov. The neighbourhood is both picturesque and fertile, producing, with little tillage, abundant crops of olives, with smaller quantities of wine and grain.

MANCHE (LA), a marit. dép. and peninsula of France, formerly included in the prov. Normandy, between lat. 48° 40′ and 49° 40′ N., and long. 0° 40′ and 2° W., encircled on the W. and N. sides, and partly on the E., by the English Channel (Manche), whence its name; and elsewhere bounded, on the E. by the déps. Calvados and Orne, and S. by Mayenne and Ille-et-Vilaine. Length N. to S. about 85 m.; greatest breadth nearly 40 m. Area, 592,838 hectares; pop. 591,421 in 1861. Surface is generally undulating. A chain of hills, of no great elevation, runs through the dép. in a NW. direction, dividing it into two nearly equal parts. Near its NE. and SW. extremities are some marshy tracts. The chief rivers are the Vire and the Ouve. The coast is mostly abrupt and rocky, especially in the N., but it has several good roadsteads and commodious harbours, of which Cherbourg is the finest. About 380,400

Digitized by Google

hectares are estimated to be arable, 94,000 in pasture, 24,000 in woods, 20,200 in orchards, and 46,290 in heaths and wastes. Agriculture is better conducted than in many other déps. The produce of corn, which is chiefly wheat and barley, exceeds the home consumption: potatoes are an important substitute for grain. Beans, peas, and a good deal of hemp and flax, are raised. The dép. is beyond the limits of the vine-culture; but about 1,000,000 hectolitres of superior cider are annually produced, and some perry. There are about 189,000 black cattle in the dép.; and fat cattle and butter are among its principal products. It has also about 291,000 sheep, estimated to yield annually 411,500 kilogr. of wool, though chiefly of inferior quality. There is a considerable traffic in horses and mules. Poultry are reared in great abundance; large quantities of eggs being exported from Cherbourg and Valognes to England and the Channel Islands. The oyster and other fisheries on the coast are important; but fish are less plentiful than formerly. Among the mineral products are iron, lead, coal, marble, slate, and granite; which last is found of excellent quality in the Chausey Isles, a group of small islands off the coast of this dép. Salt-works are established at several places on the coast. Manufacturing industry is employed on iron, copper, zinc, woollen, linen, cotton, and various other materials. Cutlery, glass, paper, hair, fabrics and lace are produced; and, in some cantons, baskets, panniers, and willow sieves are made, and sent into other parts of Normandy and into Brittany. But its principal trade is in agricultural produce and fish, fresh or salted. Manche is divided into 6 arronds.: chief towns, St. Lô, the cap., Cherbourg, Coutances, Avranches, Valognes, and Mortain. The dép. is rich in Celtic and Roman antiquities.

MANCHESTER, a parl. bor. and par. of England, the great centre of the cotton manufacture of great Britain, and the principal manufacturing town in the world, co. Lancaster, hund. Salford, on the Irwell, an affluent of the Mersey, 31 m. E. Liverpool, 35 m. SW. Leeds, 70 m. N. Birmingham, 163 m. NNW. London, and 188¼ m. by London and North Western railway. Pop. of munic. bor. 338,722, and of parl. bor. 357,979 in 1861. The entire par. of Manchester includes an area of 34,260 acres, comprising 30 townships, and had, in 1861, a total pop. of 529,245 persons. The rate of increase in the contiguous parl. bors. of Manchester and Salford, the limits of which define the extent of the town and its suburbs, during the 40 years ending with 1861, was 224·8 per cent.; and in the bor. of Salford, 259·6 per cent., a rate exceeded only by Preston, and one or two other towns. In 1773, the pop. of the township of Manchester was estimated at 22,481, and that of Salford at 4,765, making together 27,246; that is, about one-thirteenth part of the pop. in 1861.

Manchester and Salford, which, being separated only by the small river Irwell, form a single large town, covering 3,000 acres, with a dense mass of buildings, stand in a large plain, encompassed by hills on every side except the W., and dotted with towns and villages, the inhab. of which are all engaged in the production of woven fabrics and other branches of industry. The Irk and the Medlock join the Irwell close to the town, and all three are made extensively useful in moving machinery, and for other purposes. Eight bridges connect Salford with Manchester, the handsomest being Victoria Bridge having a single arch of 110 ft. span, opened in 1844. The streets are irregularly laid out, and many are narrow and inconvenient, especially in the more central parts. Great improvements, however, have been made within the last fifty years: narrow lanes have been pulled down to make way for broad avenues; noble public buildings, which would be ornamental to any capital in the world, have been erected in the chief thoroughfares; factories and warehouses of gigantic proportions have arisen in every direction; confined and mean-looking shops have been replaced by superior establishments, some of which will bear to be compared with the best in London. The paving of the streets, though still in parts very defective, has been much improved; and flagging has been generally introduced, with macadamising, in the principal streets. The whole town is lighted with gas; but in the poorer districts the lamps are but thinly dispersed, and are extinguished at too early an hour. It is well supplied with water from Longdendale, 20 m. distant, by works which supply 25 millions of gallons daily, and were erected at a cost of 1,500,000*l*. It is also sufficiently drained by an underground sewerage, and well watched by a day as well as night police. There are three main lines of street, which run in a curve SE., nearly parallel to each other. The central line, which is the principal thoroughfare of the town, comprises Market Street (formerly a narrow lane, but now vastly improved, having some of the finest shops in town), Piccadilly, and the London Road: more to the N., joined to the last mentioned line by Oldham Street, is Great Ancoats Street, with its continuations; and S. is the avenue known in different parts as Quay Street, Peter Street, and Oxford Road, connected with Piccadilly by a handsome line called Mosley Street, and a long narrow street called Deansgate.

The *public buildings* of Manchester are too numerous to admit of individual description; but the following are the largest, best built, and most important. The Exchange, which stands in the centre of the town, at the W. end of Market Street, commenced in 1846, is a noble structure, with a lofty Doric portico. The Grand Hall, on the lower floor, is 185 ft. in length, by 92 ft. in width, and of a corresponding height, being one of the most capacious apartments in the empire appropriated to commercial purposes. The other rooms, used for various purposes, are on a suitable scale. The establishment is supported by subscription. The chief business day is Tuesday, on which, about noon, all the principal manufacturers of Lancashire may be seen in or near this building. The Town Hall, in King Street, is of Ionic architecture, and extremely elegant, being formed on the model of the temple of Erectheus at Athens, with a central octagonal cupola, resembling Andronicus's Tower of the Winds. It cost upwards of 40,000*l*.; and comprises, besides rooms for the police business and gas-offices, a spacious and well proportioned public room (ranking amongst the finest in Europe), 131 ft. long and 38 ft. broad. Smaller town-halls are situated in Salford and Chorlton, the former of which townships has its separate corporation and police establishment. The Corn Exchange, in Hanging Ditch, is a handsome building, erected from a design adapted to it from the temple of Ceres at Athens. Six Ionic columns support the central pediment; and on each side are wings, very slightly projecting, and ornamented with pilasters; between which are the entrances to a square hall, inclosing an area of about 6,000 sq. ft., and affording standing room for 2,000 persons. The assize courts, a large edifice in the Gothic style, built at an expense of 80,000*l*., was opened in 1864. Another noble structure, the branch bank of the Bank of England, in King Street, nearly opposite the town hall, in the Doric style, from the designs of Mr. Cockerell,

Digitized by Google

was opened in 1847. Of the buildings devoted to charitable purposes, to literature, or to public amusement, the following deserve notice from their architectural beauty. 1. The Royal Infirmary and Lunatic Asylum, in Piccadilly, built of stone, and now constituting one of the chief ornaments of Manchester. 2. The Athenæum, in Bond Street, a peculiarly elegant structure, designed by Barry, in the Italian style, and completed at an expense of about 13,000*l.* 3. The Royal Institution, in Mosley Street, built at a cost of 30,000*l.*, from Barry's designs, having a portico in the Ionic style, and comprising, besides other apartments, a handsome gallery for the exhibition of pictures, and a theatre for lectures capable of accommodating 800 persons. 4. The Portico News-room, in the same street as the institution, having an Ionic portico. 5. The Union Club House, also in Mosley Street, a fine stone building, with internal accommodations equal to those found in the best London establishments of the same description. 6. The Natural History Society's Hall, in Peter Street, a large square building, having in the principal front a portico supporting a pediment, and comprising a fine hall, lighted from a cupola, and different apartments stored with numerous specimens of birds, insects, fossils, shells, &c., and a few quadrupeds. 7. The Concert Hall, near the last mentioned building. 8. The Theatre Royal, in the same street, having a handsome stone front with a portico partly in the Corinthian style. 9. The Asylum for the Blind, and the School for the Deaf and Dumb, at Old Trafford, designed by Mr. Richard Lane, in the Elizabethan style, having a fine frontage of stone, consisting of two wings and a projecting centre, formed by the chapel of the two institutions. 10. The Free Trade Hall, in Peter Street, has nothing but its great size to entitle it to attention. It is an ungainly brick building, without windows or any sort of architectural beauty.

Among the sacred edifices of Manchester, the cathedral church far surpasses the others, both in size and architectural beauty. It stands close to the Irwell, near Victoria Bridge; and was erected in the fifteenth century, in the perpendicular Gothic style, having been frequently since repaired and in part rebuilt. The interior is about 180 ft. in length by 60 ft. in breadth. The nave and aisles are pewed, but the private chapels, which adjoin them, have been thrown open. The Sunday services are performed in the nave, and are extremely well attended. The choir is one of the finest in England, and the tabernacle-work is unrivalled: the monuments are numerous and full of interest; the carved figures, with which the church is liberally adorned, are as quaint and grotesque as an antiquary could desire; and there are several beautiful stained glass windows, with inscriptions and paintings. The college was founded in the reign of Henry VI., dissolved by Edward VI., and again chartered, in 1578, by Queen Elizabeth, who directed that the establishment should comprise a warden, four priests, two chaplains, and eight choristers. This charter was, for the most part, confirmed by Charles I. by a charter dated Sept. 30, 1635. This, which had formerly been a collegiate church, was made a cathedral in 1848, when the bishopric of Manchester was established. The diocese comprises the co. of Lancaster, excepting the hund. of W. Derby, which continues to be included in the diocese of Chester. The bishop has a revenue of 4,200*l.* a year. The dean (formerly warden) and four canons divide among them a nett revenue of 4,025*l.*, of which one-third part goes to the dean, and the other two-thirds in equal parts to the canons. A chapel of ease was erected in Salford in 1634: this, St. Anne's, erected in 1712, and St. Mary's erected in 1755, being the only places of worship in the town till 1760, between which and 1800 eight additional churches were built. St. Philip's, with a spire of 159 ft., and St. John Baptist, were built in Hulme, 1859–60, in the modern Gothic style. Many other churches, 2 of which (St. Luke's, Cheetham, and St. George's, Hulme) are very elegant, and cost 20,000*l.* each, have been erected in the present century. The R. Catholic church of St. John, in Chapel Street, Salford, is one of the finest edifices devoted to religious purposes in Manchester. It is a cruciform structure, in the decorated English style, 200 ft. in length, the breadth in the transept being 130 ft. and the apex of the spire 240 ft. in height. The Independents have a very fine chapel with a magnificent spire, in Stretford New Road, to which are attached the handsomest schools in the city. It will be sufficient farther to add, that almost every religious sect known in the U. Kingdom has its representatives in Manchester, and most part of them have at least a chapel or meeting-house. The Independents opened a chapel in 1762, and the Wesleyan Methodists in 1780. Three cemeteries have been laid out in Cheriton, Ardwick, and Harpurhey; and the noxious practice of interring bodies within the town is slowly but gradually going out of use.

Education.—Among the schools deserving particular notice, the first place is due to the grammar school, founded in 1520, by Hugh Oldham, bishop of Exeter. Its revenues amount to upwards of 4,500*l.* a year; and in consequence of a decree of Chancery, in 1833, its usefulness was increased by the opening of a lower school, and a general augmentation of the establishment. The decree of 1833, however, was *ex parte*, and as it did not effect all the alterations that were necessary, a suit was instituted to obtain further reforms, in which a judgment was given by the lord chancellor on 10th Nov. 1840, from which it appears that 'the income in 1833 was 4,550*l.*, and the salary awarded to the head-master was 600*l.* per annum; and the salaries of all the masters together was 2,050*l.*, whilst the number of scholars, including boarders, was only 198.' The lord chancellor concluded his judgment as follows:—'I propose, therefore, to declare, that in all future appointments of feoffees and trustees regard should be had to the qualification required by the statutes; that all children of an age capable of instruction are entitled to be admitted into the school; that no part of the funds of the charity are hereafter to be applied towards paying premiums for exhibitions to boys who are or have been boarders in the houses of any of the masters, except in continuing to pay exhibitions already granted; and that such boarders are not in future to derive any benefit from the funds of the charity in any manner by which the expenditure of such funds may be increased; and with these declarations, I shall refer it to the master to approve of such alterations in the scheme contained in the report of 1833 as may be necessary to carry the same into effect, and as the master shall find to be proper for the purpose of more effectually carrying into effect the objects of the charity.' Few establishments in England confer so many university advantages on their *alumni*. It has 16 exhibitions of 60*l.* a year, tenable for 4 years; 16 Somerset scholarships at Brasenose College, Oxford, averaging 20*l.* a year; and several others of less value both at Oxford and Cambridge; besides which it derives great, though not exclusive, advantages from the valuable Hulme's exhibitions, connected with Bras. Coll., and tenable for 3 years after the degree of B.A. The instruction is efficient; and it is said to rank amongst

Digitized by Google

the best grammar schools in the kingdom. The college, founded by Humphery Cheetham, in 1665, is likewise a wealthy scholastic establishment, comprising, besides lodgings and school-rooms for boys, a valuable library of about 30,000 vols. This college has also a museum of curiosities of little real value, but much visited by strangers and holiday people. The number of scholars is restricted to 80, one-half of whom must belong to Manchester and Salford, the rest belonging to Bolton, Turton, Droylsden, and Crumpsall. A plain education is furnished, and the scholars are afterwards apprenticed and fitted out in trade. Owen's College, in Quay Street, founded in 1815, is well endowed, and has ten professorships attached. The Commercial Schools, established in 1845, are intended to furnish a good education to the children of the middle classes. Other endowed charities for instructing children are amalgamated with national and other schools, very liberally supported, and conducted in the most efficient manner; and besides these, the town has an asylum for the blind, erected by public subscription, and supported by an endowment bequeathed by Thomas Henshaw, esq., of Oldham, and a deaf and dumb school, established in 1823, and remodelled in 1836: there are 80 scholars on the establishment. The Independents, Wesleyans, and Unitarians have all collegiate institutions, either in the town or in its immediate vicinity. A School of Design, assisted by government, has also been founded in Manchester.

The Royal School of Medicine and Surgery, in connection with the infirmary, was founded in 1824. It has museums of human and comparative anatomy, a chemical laboratory and library, and is said to be well conducted. It is on the same footing as the metropolitan medical schools.

The charitable institutions of Manchester, for the relief of the sick, disabled, and destitute, comprise an infirmary, to which large additions have recently been made; a dispensary, a fever hospital, or 'house of recovery,' a lying-in hospital an eye institution, a lock hospital, a night asylum for the destitute poor, a female penitentiary, a provident society, a dispensary for children, a dispensary for diseases of the skin, and four other dispensaries, relieving altogether about 36,000 patients annually, and supported by funds from bequests and subscriptions, amounting to 18,000*l.* a year. Besides these, there are various minor charities belonging to Manchester and Salford, the aggregate income of which exceeds 5,000*l.* a year: so that upwards of 23,000*l.* are annually expended in the relief of the poor, over and above the sum raised by rates.

The literary and philosophical establishments of Manchester are very numerous. They include, among others, a philosophical society, instituted in 1781, and which has reckoned among its members Dr. Percival, the three Henrys (father and sons), Dalton, and other eminent men, whose science and discoveries have been of material advantage, not only to the town, but to the world generally. Indeed, few provincial societies of the kind have earned so high a reputation. Its memoirs have been translated into both the German and French languages. A geological and mining society, founded in 1838: a botanical and horticultural society, established in 1827, possesses gardens that cover 16 acres: a zoological society has spacious gardens on the Bury Road, tastefully laid out, and containing a good and increasing collection of animals: a society of natural history has a good museum, and is supported by a large body of subscribers. The Royal Institution was founded in 1823, for the promotion of literature, science, and the fine arts. The principal hall of its fine building has a statue of Dalton by Chantrey. The Athenæum, established in the view of affording to the middle classes a suitable resort for reading, study, and conversation, is supported by about 1,300 members, who contribute each 24*s.* per annum. It has a lecture room capable of accommodating 1,000 persons, and a library of 9,000 vols. The Cheetham Society, founded in 1843, has for its object 'the publication of historical and literary remains connected with the counties palatine of Lancashire and Cheshire.' It is limited to 350 mem., who pay an annual subscription of 1*l.*, which entitles them to a copy of all the works published during the year. There are two mechanics' institutes, one in Manchester and one in Salford: they are well provided with libraries, museums, and apparatus, and are pretty well attended. They have numerous evening classes for instruction in the various branches of a useful education, including French and German. There are three lyceums, specially intended for the improvement and recreation of the working and other classes. The Royal Victoria Gallery has an exhibition of objects in mechanics and science, and courses of lectures. A temperance society, formed in 1835, was the first to inculcate total abstinence from all intoxicating beverages.

In 1846 three fine parks were opened in the vicinity of the town for the recreation of the inhabitants. The principal of these, called Peel Park, in honour of the late great statesman, about a mile W. from the Exchange, is tastefully laid out. The Salford library and museum, open to all ranks and orders of the people, is in a house in this park. The other parks, though not quite so accessible, are largely resorted to, especially on Sundays.

Banks.—The banking establishments of Manchester, which are numerous, and conducted on a scale corresponding to the commercial importance of the place, comprise, besides three private banking houses, of great wealth and respectability, a branch of the Bank of England and three joint-stocks, viz. the Manchester and Liverpool District Banking Company (1829); the Union Bank of Manchester (1836); the Manchester and Salford Banking Company (1836); and branches of the National and Provincial Bank of England, with several other banks.

Prisons and Police.—Manchester possesses several large establishments connected with its internal economy. The workhouse, which occupies an eminence N. of the town, is a very extensive and well-conducted establishment, fitted to accommodate 1,000 inmates. The Salford workhouse, in Greengate, has accommodation for about 400 inmates. Another workhouse, on an improved plan, has been erected in the township of Chorlton. The New Bailey prison, in Salford, close to Albert Bridge, commenced by Howard in 1787, has been since greatly enlarged. It has accommodation for about 800 prisoners, and is well-conducted; but, owing to the great increase of population and crime, it was found inadequate to the wants of the hund., and a new prison, the Manchester bor. gaol, was opened in 1850. It is constructed on what was supposed to be the most approved system, each prisoner being confined in a separate cell. It has accommodation for between 400 and 500 such inmates. A police-office court is held daily by a stipendiary magistrate, appointed by the chancellor of the duchy of Lancaster, with a salary of 1,000*l.* a year. The police was formed in 1842, and is completely under the control of the corporation, the regulations in regard to its government being embodied in the Manchester Municipal Act. The force in the bor. consists of a chief con-

Digitized by Google

stable and chief superintendent, 75 other officers and clerks of different grades, and above 400 constables. The subjoined table shows the number of persons apprehended for crimes by the Manchester police, and of persons proceeded against summarily for offences before the justices, in each of the years 1861 and 1862:—

	1861	1862
For Crimes: Number of Persons apprehended	1,576	1,688
Do. discharged	930	985
Do. bailed and committed for Trial	646	703
For Offences: Number of Persons proceeded against, or who appeared on Summons	8,618	10,375
Do. discharged	2,178	2,561
Do. convicted	6,440	7,814
Total for Crimes and Offences: Number of Persons apprehended, proceeded against, or who appeared on Summons	10,194	12,063
Do. discharged	3,108	3,546
Do. bailed and committed for Trial or convicted	7,086	8,517

The police fire-engine establishment is perhaps the most effective in the kingdom, after that of the metropolis: it comprises, including both bors., 13 engines completely furnished with every necessary implement, fire-escapes, and water-barrels, and a body of nearly a hundred firemen, commanded by a superintendent. The Manchester gas-works are the property of the town, and the profits are applied towards its improvement: the works were established in 1817, but the streets were not generally lighted with gas till 1824. The main pipes extend, in various directions, upwards of 200 miles.

The Markets of Manchester are not such as a town of great wealth and magnitude might be expected to possess; and this circumstance is most probably owing to the fact, that the tolls are not the property of the town, but belong to the lord of the manor. There are no general markets, like those of Liverpool, Birmingham, and Newcastle; but several are scattered in different parts of the town. In Victoria Street, Swan Street (Smithfield), Camp Field, and Deansgate, are markets for butchers' meat and vegetables; and a fish-market was erected near the exchange in 1828. The cattle-market is held every Wednesday, in Cross Lane, Salford; a large area on its sides is fitted up with stalls, filled with various articles both of farming and manufactured produce. The market-days are Tuesday, Thursday, and Saturday, the first-named being the manufacturers' day, and the last the chief market for agricultural produce and provisions. The fairs are held in Easter and Whitsunweek, the first week in Oct., and on Nov. 17. The first of these, called Knott-mill Fair, is a mere popular festival, and the rest are cattle fairs.

Manufactures.—Manchester, though situated close to an almost inexhaustible coal-field, and deriving great advantages from the vicinity of three streams, available for machinery, would never, in all probability, have attained to her present magnitude and importance, as the first manufacturing town of the world, but for the invention of the steam-engine, and the wonderful improvements made since 1760 in the manufacture of cotton twist and fabrics, through the genius and discoveries of Hargreaves, Arkwright, Crompton, Cartwright, and others. Before the spinning frame, which was invented in 1767, came into operation, the imports of cotton wool did not amount to 4,000,000 lbs. a year, and the exports hardly exceeded 200,000*l.* Arkwright's patent was set aside in 1785, and since then the progress of the cotton manufacture of Great Britain, and especially of Manchester, has been rapid beyond all precedent. Previously to 1785, the imports of cotton wool had not reached 12,000,000 lbs. in any single year; but in 1787 they amounted to 23,250,263 lbs. The progress of the manufacture was not impeded by the great war with France, to the successful termination of which it contributed more, perhaps, than any thing else. The imports of cotton wool, in the year 1864, amounted to 893,304,720 lbs., of which quantity 648,602,416 lbs. were detained for home consumption. But these imports of 1864 were excelled by those of 1860, which amounted to no less than 1,390,938,752 lbs., of which 1,140,599,712 lbs. were retained for home consumption. The cotton manufacture now forms, next to agriculture, the principal business carried on in the country, affording an advantageous field for the accumulation and employment of millions upon millions of capital, and of thousands upon thousands of workmen. About 1½ millions of people are supported by spinning and weaving cotton, and the different supplementary employments of the trade; and fabrics of great beauty and excellent quality, which a few years ago were out of the reach of all except the wealthy, have been so much reduced in price as to be within the command of all but absolute beggars. Of this gigantic manufacture Manchester is the grand centre, absorbing, with its neighbourhood 10 m. round, fully three-fourths of the trade, and comprising, besides spinning mills, most extensive power-loom factories, and large dyeing and printing establishments. The manufacture of silk goods, also, which was introduced in 1816, has generally been in a flourishing state since the removal, in 1826, of the oppressive import duties on raw silk. In the infancy of the trade, silk handkerchiefs and mixed goods were principally made; in 1822, gros-de-Naples and figured sarsenets were introduced; and at present nearly every kind of silk, from the rich brocade to the flimsy Persian, is manufactured, consuming large quantities of raw silk, and employing 4,000 hand-looms, besides 3,000 persons in throwing-mills, and 600 in dyeing and printing houses. Mixed goods of silk and cotton, silk and woollen, and cotton and woollen, occupy many hands; and many hundred persons are engaged in the various branches of handicraft subordinate to the principal object of industry. In some cotton factories the process of spinning only is carried forward; but in others the whole process is carried on, from the first carding to the ultimate dressing of the woven and bleached fabric. Many of them are buildings of extraordinary size, comprising 7 or 8 stories, erected at a heavy expense, and filled with machinery costing 30,000*l.* or 40,000*l.* The rooms are kept in the most perfect state of cleanliness, and the strictest order, regularity, and silence prevail throughout the establishments. Several thousands of spindles are at work in each of the principal factories; and in many of them upwards of 600 power-looms are in action, each producing from 15 to 20 pieces of fabric, of 24 yards each, per week. Besides the pop. connected with the factories, which almost absorb the plain-goods' trade, including jacconets, twilled cloths, and fustians, upwards of 9,000 hand-loom weavers are employed in Manchester and the neighbourhood in weaving cotton, silk, and mixed

Digitized by Google

goods. The cotton fabrics are quiltings, figured waistcoatings, twilled shawls and handkerchiefs, checked and striped ginghams, tape-strings, dimities, apron-checks, checked handkerchiefs, buff-checks and buffs, coarse shirtings and sheetings. The silk fabrics comprise velvets, figured sarsenets, figured and plain Levantines, plain satins, plain serges, sarsenets and gros-de-Naples, checked sarsenets, string-Persians, ducape handkerchiefs, satin checked cravats, Brussels handkerchiefs, black bandanas, Welsh shawls, romuls, turbans, Barcelona handkerchiefs, and grey bandanas. The mixed are chiefly for waistcoatings, handkerchiefs, cravats, and shawls. The weaving of each of these fabrics, with a variety of others, may be regarded as a separate branch of the weaving trade; and the earnings of the weavers employed on each are as various as the fabrics.

The manufacture of machinery, inc. locomotive engines and tool-making, is conducted on a most extensive scale, and is in fact, next to the cotton trade, the most important business in the town. The machinery for carding, spinning, and weaving cotton is all of the most delicate kind, and requires to be adjusted and finished with the greatest care. Steam-engines are made of different sizes, varying from 8 to 400 horse-power; and the castings are often of gigantic size, weighing from 30 to 50 tons. The iron-planing and riveting machines are curious specimens of mechanical ingenuity, and have greatly tended to facilitate the manufacture. Many of the workmen receive from 2*l.* to 3*l.*, and few less than 30*s.* weekly wages.

Canals and Railways.—The speedy and cheap communication established with the port of Liverpool, and other places, has been at once a cause and a consequence of the increase of manufactures in Manchester. It became at the close of the last century, a great centre of internal navigation. Brindley constructed the Duke of Bridgewater's canal, uniting with the Mersey at Runcorn, in 1761; the Bury and Bolton canal was projected in 1791; that to Ashton and Oldham in 1792; and that to Rochdale, in 1794; and these communicate with other canals, in such a manner as to establish an easy communication with the eastern, central, and southern counties, including the ports of Hull, London, and Bristol, as well as that of Liverpool, which is, *par excellence*, the port of Manchester. Large sums were sunk in excavating these canals; but the returns far exceeded expectation, and the profits to the shareholders were in some cases immense.

The Mersey and Irwell Navigation Company having deepened the river Irwell, vessels of 80 tons burden may now navigate the whole distance from Manchester to Runcorn. As soon as this had been effected, the inhabs. applied to have Manchester made a port, and to be allowed the privilege of bonding goods. But as sea-going vessels do not as yet come up to Manchester, this concession was strongly opposed, and was only, after a great deal of canvassing, granted under certain conditions. The gross sum of customs duties received amounted to 70,319*l.* in 1846; it rose to 319,300*l.* in 1850; and fell—chiefly in consequence of the lowering of duties to 189,817*l.* in 1859; to 165,748*l.* in 1862; and to 160,103*l.* in 1863.

The railway between Manchester and Liverpool was opened in 1830; and, since that period, the former has become (the metropolis not excepted) the greatest centre of railway travelling in the kingdom. This extraordinary facility of conveyance is of the greatest importance to the town, inasmuch as it enables its produce to be conveyed with the utmost expedition, and also very cheaply, to all parts of the country; and as it gives equal facilities for the importation of the various products required for the subsistence of the inhabitants, or on which they exercise their labour and ingenuity.

Government.—Manchester has been incorporated; and the mun. bor. is divided into 15 wards, the government being vested in a recorder, mayor, 15 aldermen, and 48 councillors. Quarter sessions are held by the recorder, and there is a court of record for the recovery of debts under 50*l.*; and a county court, before which 13,169 plaints were entered in 1848. There is also a court of record for the trial of civil actions in Salford up to 50*l.*, or by consent to any amount. Its jurisdiction is co-extensive with the hundred of Salford, except the bor. of Manchester, and its jurisdiction extends even into Manchester, if the debt or damage be under 40*s.* There is also a county court for the 5 districts comprised in the Salford division.

Notwithstanding its vast importance. Manchester did not enjoy the privilege of sending representatives to Parliament till the Reform Act gave to the manufacturing interests of the country that influence in the legislature to which they had been long entitled. Manchester was then erected into a parl. bor., with power to send 2 mems. to the H. of C.; its boundaries including, besides Manchester, the eight other townships enumerated at the commencement of this article. Reg. electors, 21,878 in 1865. The same act conferred on Salford the privilege of sending 1 mem. to the H. of C.: its limits comprise two other entire townships, and part of a third. Reg. electors, 5,137 in 1865. Manchester has also been formed into a union under the Poor Law Amendment Act.

Condition of the People.—The increase of wealth in Manchester, during the last half century, has been quite unprecedented, and it has at present, in proportion to its size, a greater number of opulent capitalists than any other town of the empire. The capital vested in mills, machinery, and stocks of goods, is immense; and, in addition to the vast sums that are thus employed in their peculiar business, the capitalists of Manchester and the adjoining districts have been the great promoters of railways in all parts of the empire, and hold a very large proportion of the stock embarked in these undertakings. To achieve such great results, a combination of all those qualities that go to form accomplished men of business has been required; and no where do we find the persevering attention to details, added to the sagacity to distinguish between the doubtful and the certain, and the enterprise to embark in remote and apparently hazardous, though really safe schemes, that characterise the highest class of commercial men, so generally diffused as in Manchester. It is, in fact, the grand arena of industry and enterprise. Every one is striving to raise himself to distinction, and to outstrip his neighbour in the accumulation of wealth. But there are no mean jealousies, or unfair jostlings; there is more than room enough for every one; and every one knows that his success is wholly dependent on his own efforts.

The shopkeepers and middle classes of Manchester are more attached to old habits than those of most other towns. In proof of this it may be mentioned, that by far the greater number of them continue to dine at the primitive and unfashionable hour of one. At no very distant period, indeed, they were accustomed to shut their shops from one till two; and though that is no longer the case, the banks will not, at present, with a few exceptions, cash cheques sent to them at such a time, or allow their clerks to be interrupted when at dinner.

But it is not so easy to arrive at any very definite conclusions with respect to the condition of the

Digitized by Google

lower classes in this great workshop. On the whole, however, it must be considered as tolerably satisfactory. No doubt, the condition of the English part of the population has been somewhat injuriously affected by the prodigious influx of Irish immigrants, of whom and their descendants there are probably not fewer than 85,000 in the town. The Irish, it is but fair to say, are neither peculiarly disorderly nor peculiarly dishonest; but their competition has depressed wages, or hindered them from rising, and their example has accustomed the English to a lower standard of food and comfort. But despite the influence of this fruitful source of degradation, the workpeople of Manchester seem, when employed, with the exception of the hand-loom weavers, to be really well off. Unluckily, however, a number of individuals, partly belonging to the town, but mostly new comers from Ireland and other parts of England, are usually without employment, and in a state bordering on destitution. It is unfortunate, too, that so many of the workmen's wives should be employed in factories, as this takes them away from their families, and prevents them from bestowing sufficient pains on the training of their children, and their household affairs. It is singular, indeed, but, on the whole, not to be wondered at, how ignorant workmen's wives, engaged in factories, and brought up as factory girls, are of most matters connected with domestic economy; and how much more comfortable their families might be were they familiar with such details, even though their earnings were less. It is not true, however, that the condition of the workpeople has been deteriorated, and, in point of fact, it has, on the contrary, been materially improved. Most descriptions of labourers receive good wages; and such skilled labourers as are temperate and industrious are, speaking generally, in comfortable circumstances.

The lower classes of Manchester live principally in houses above ground, consisting for the most part of cottages, of which many lengthened streets have been built of late years; but, in addition to these, great numbers inhabit cellars or underground floors, sometimes below the cottages, and sometimes below other houses.

It is to be regretted that effectual provision had not long since been made in Manchester and other large towns for their proper drainage and pavement, and for laying down rules as to the erection of houses. The authorities in Manchester have done all in their power, under the existing laws, to improve the streets; but there is no general building act for the town, and except in certain districts, where the magistrates have been entitled to interfere, each proprietor built as he pleased. Hence cottages have sprung up row behind row, without the streets or alleys between them being of sufficient width, or drained or paved. Cellars, however damp and unhealthy, are preferred by a large proportion of the lower classes both here and in Liverpool, not so much from their cheapness, as because they afford facilities for dealing in various sorts of articles, and because their inmates either are, or believe themselves to be, more independent than if they resided as lodgers in houses rented by other parties.

It is unhappily true, that many of the dwellings of the lower classes, especially those of the Irish, exhibit a great want of furniture, of cleanliness, and of comfort. This, however, is not owing, as many have supposed, to the growth of the factory system, but partly to the poverty, and still more to the perverse habits, of the occupiers. In a tract written in Manchester, and published by authority in 1755, long before the factory system had an existence, the houses of the poor are said to be 'most wretched,' 'filthy and nasty' in the extreme, and 'noisome and infectious.' (See extract from tract in 'Manchester as It Is,' p. 36.) There is really, therefore, no room or ground for saying, that any portion of the poor are worse lodged now than formerly; while, on the other hand, of 37,724 dwellings of the labouring classes, examined by the agents of the Statistical Society, no fewer than 27,281 were decidedly 'comfortable;' and as respects the clothing and other accommodations of the poor, they are superior at present to what they have ever previously been. Their prosperous condition is evinced by the great average consumption of butchers' meat.

Owing to the immense number of factories, and of steam engines at work in them, there is generally a dense cloud of smoke hanging over the town; and such buildings as are not frequently cleaned have a dirty, blackened appearance. Attempts, however, have been made to obviate this inconvenience by compelling the mill-owners to adopt means for consuming or destroying the smoke arising from their works.

But despite the disadvantage arising from the prevalence of smoke, Manchester is not unhealthy. No doubt a good deal of fever prevails at most periods of the year, in the poorer districts, especially in those where the streets are ill-paved and the sewerage defective. But, on the whole, Manchester is less unhealthy than Liverpool, or Glasgow, or the old town of Edinburgh, which has no manufactures. The idle and absurd stories that were so industriously propagated with respect to the influence of factory labour on health and morals, are now pretty well exploded. Latterly, indeed, there would appear to be a considerable increase of crime; but this increase is, perhaps, more apparent than real, and is mainly a consequence of the improved state of the police, and of trivial offences that formerly escaped notice being now visited with fine or imprisonment. The truth is that, in respect of morality, the labouring population of Manchester has but little to fear from a comparison with that of any large town in the empire.

It is needless to observe that the interests of the employers of labour and those of the labourers, though apparently conflicting, are the same; and that neither party can prosper without that prosperity redounding to the advantage of the other. But, notwithstanding this identity of interests, there is, it must be admitted, but little sympathy between the great capitalists and workpeople in this or any other large manufacturing town. This is occasioned by the great scale on which labour is now carried on in factories, and by the consequent impossibility of the manufacturers becoming acquainted with the great bulk of the people in their employment. They do not, in fact, so much as know their names; they look only to their conduct when in the mill; and are wholly ignorant of their mode of life when out of it, or of the condition of their families. The affections have nothing to do in an intercourse of this kind; every thing is regulated on both sides by the narrowest and most selfish views and considerations; a man and a machine being treated with precisely the same sympathy and regard. It is not to be denied that this is a state of things fraught with considerable danger; and that no society can be in a really sound or healthy state where the bond of connection between the different ranks and orders is such as now prevails at Manchester and other great towns. Indifference, on the one hand, necessarily produces disrespect, insubordination, and plotting, on the other. However, it is easier to point out a condition of this sort than to suggest

Digitized by Google

any means by which it may be obviated. It may be doubted, indeed, whether it admit of any effectual remedy. The whole tendency of society, in modern times, is to make interest, taking the term in its most literal and sordid sense, the link by which all classes are held together; and should any circumstances occur to make any considerable portion of society conclude that their interest is separate from or opposed to that of the others, there would be but few other considerations to which to appeal to hinder the dissolution of such society.

Climate.—The mean annual quantity of rain falling in Manchester (at an average of 33 years) is 36·140 inches, whilst the mean annual quantity falling in Lancaster (at an average of 20 years) is 39·714 inches: the comparatively slight variations in the temperature likewise contribute greatly to the healthiness of the town.

History.—According to Whittaker, the historian of Manchester, 'the Roman invaders of this country fixed a military station in a place since called Castlefield, to which they gave the name Mancunium,' whence Manchester has been derived. In the time of the Saxons the old town was deserted, and about 627 another was built on its site. In 920, according to Dr. Aikin, the Saxon king, Edward the Elder, ordered Manchester to be fortified. In Domesday Book the town is called a manor, and is described as having two churches. In the 14th and 15th centuries it received great additions and improvements, so that in Leland's time it was reckoned 'the fairest, best builded, quickest, and most populous town of Lancashire.' Camden also mentions it as being famed in his time for the manufacture of woollen cloths, then called 'Manchester cottons,' that is, coatings. The first authentic mention of the cotton manufacture in England is made by Lewis Roberts, in his 'Treasure of Traffic,' published in 1641, where it is stated, 'The town of Manchester in Lancashire must be also herein remembered, and worthily, for their encouragement, commended, who buy the yarn of the Irish in great quantity, and, weaving it, return the same again into Ireland to sell. Neither doth their industry rest here; for they buy cotton wool in London that comes first from Cyprus and Smyrna, and at home work the same, and perfect it into fustians, vermillions, dimities, and other such stuffs; and then return it to London, where the same is vented and sold, and not seldom sent into forrain parts, who have means, at far easier terms, to provide themselves of the said first materials.' (Orig. ed. p. 32.) In 1650, the inhabs. of Manchester were reckoned the most industrious in the N. of England. The town was stated to be a mile long, with open and clean streets, and good buildings; and in 1720 it is described as 'the largest, most rich, populous, and busy *village* in England, having about 24,000 individuals within the parish.' Fustians were the earliest article of manufacture, and other fabrics were made soon afterwards; but the great increase of pop. and commercial prosperity did not take place till 1770, when machinery was first introduced into the town. From that year down to the present time Manchester has been a scene of rapidly increasing industry, and has been distinguished by the invention and enterprise of its citizens; its working pop. supplies every quarter of the world with clothing; and wealth, the reward of successful labour, flows in from all sides in a large, rapid, and uninterrupted current.

MANCHOORIA (Chin. *Kirin-oola*), an extensive region of NE. Asia, belonging to China, and the original seat of the present ruling dynasty (Ta-thsing) of the Chinese empire, lying between lat. 41° and 57° N., and between long. 117° and 140° E., bounded N. by the Russian gov. of Yakoutsk, E. by the Gulf of Tartary and Sea of Japan, S. by China Proper, and W. by the Russian gov. of Irkutsk and Mongolia, from which latter it is separated by a wooden palisade, connected with the great wall of China, and by a line running down the Songari and other rivers to the Daourian range, on the S. of Siberia. Estimated area, 700,000 sq. m. The S. provinces are the only parts of the country that have been visited by Europeans, the knowledge of the remainder being derived only from more or less doubtful statements. Manchooria lies chiefly in the great valley formed by the Amur and Songari, with their numerous tributaries, and is bounded by three principal mountain chains, 1. one on the E., running from the peninsula of Corea along the whole line of coast to the N. boundary, and having a probable elevation of 5,000 ft.; 2. the Daourian mountains (called, by the Chinese, the outer Hing-an-ling), which form the entire N. boundary of Manchooria, but also send out minor offsets into the centre of the country; 3. the inner Hing-an-ling, or Sialkoi chain, which appears to be a continuation of the Shan-see mountains, and to extend, with little interruption, over a great part of Mongolia. Besides the above principal ranges, there are, to the N. of Corea, some chains of inferior importance, bearing several different names; but this part of the country, near the coast, though nominally a part of Manchooria, is inhabited, almost exclusively, by Ainos, a people similar to those inhabiting Jesso and Tarakai, in the empire of Japan. The chief river of Manchooria is the Amur, Sagalien or Kwentung (for it is thus variously called), which, measured along its windings, is about 2,200 m. in length, and, with its tributaries, drains a territory of about 900,000 sq. m. Several of these streams afford pearls; but the principal pearl-fishery is on the E. coast, in the channel of Tartary. It is a government monopoly, and is carried on by Manchoo soldiers, who are required, annually, to deliver into the imperial coffers a fixed quantity of pearls. The chief lakes are the Hinkai-nor, a large sheet of water near the source of the Ousouri, in the prov. of Kirin, and the Hoorun and Pir, which give their names to the most W. district of the prov. Tsitsihar: there are a few others in different parts of the country, but only of small size.

The nature of the Manchoo soil, and its mineral productions generally, are little known. The people in the N. being chiefly nomads, subsisting by the produce of the chace, pay little attention to tillage; but agriculture is common in the S. districts, and the *cerealia*, as well as hemp and cotton, are extensively cultivated. The staple productions, however, are ginseng and rhubarb, the former being an exclusive government monopoly. The province of Shing-king, on the gulf of Pechelee, produces corn, millet, and peas, large quantities of which, with ginseng, are sent by sea to the S. provinces of China. The forests, which clothe the sides of most of the mountains, comprise oaks, pines, firs, and birches; lime-trees, maples, oleanders, and acacias being found on the plains towards the S. The domestic animals of Central Europe are common in the more cultivated districts; but the cattle are small, and the breed of sheep peculiar to this country, called *argah*, is small and coarse-woolled. Near the Yablonoi range, reindeer are kept, and camels are to be seen in many parts of the S. provinces. The wild animals comprise the ermine, sable, fox, and bear, hunted for their furs, which are a considerable article of trade with the Russians. Fish, especially salmon, and remarkably fine sturgeons, are abun-

Digitized by Google

dant in the rivers, and held in high estimation by those living near the banks.

The Manchoo territory is divided into three provinces, 1. Shing-king (comprising the anc. Leaou-tung), near the borders of China; 2. Kirin, occupying the country E. of the Songari; and 3. Tsitsihar, comprising the whole country W. and NW. that river. The government of the first of these provinces is conducted by civil officers, on the same plan as in China; but the other provs. are under a government more strictly military than any other portion of the Chinese empire. The governors and magistrates are all military men; and the law makes all males, above 16 years of age, liable to serve under the standards to which they belong by birth, of which there are 8, each being distinguished by its peculiar flag. Kirinoolo is the metropolis of the country, and the residence of the supreme governor. Ningoota, on the Hsoka, a tributary of the Songari, is also held in high esteem, in consequence of its having been the residence in former times of the reigning family of China. With respect to trade, however, both are inferior to Fung-hwang-ching, on the borders of Corea. The sea-ports frequented by the Chinese junks are Kin-tchou, at the N. end of the gulf of Leautung, and Kaitchou, on the same gulf, E. of that last mentioned. The other cities of Manchooria, except Moukden, the old cap., and still denominated 'the affluent metropolis,' have no claim to rank higher than villages, though most of them are surrounded by walls, and garrisoned by small bodies of soldiery.

The general history of the Manchoos, or Eastern Tartars, with an account of their physical conformation, has already been given at some length in the article ASIA, in this work, to which the reader is referred for further particulars.

MANDAVEE, a town and sea-port of Hindostan, being the most populous town and principal emporium of Cutch, on the S. coast of which it stands, 35 m. SSW. Bhooj; lat. 22° 50′ N., long. 69° 34′ E. Pop. estim. at 50,000, of whom upwards of 15,000 are Bhattias, 10,000 Banyans, 5,000 Brahmins, and the rest Lohannas, Mohammedans, and Hindoos of low caste. The town is within gun-shot of the beach, and is surrounded with fortifications in the Asiatic style. Its environs are laid out in gardens well stocked with cocoa-nut and other trees. The bed of a river, nearly dry, except in the rains, covers the E. face, and joins the sea, forming the only harbour which Mandavee has. Small boats, laden, can cross the bar at high tides; larger vessels unlade in the roadstead. A brisk trade is kept up with Arabia, Bombay, and the Malabar coast, in which upwards of 800 boats, of from 40 to 500 candies tonnage, are employed. The exports are chiefly cotton, *mussoo* of silk and cotton thread, piece goods of a coarse kind, alum, and glue. The imports are, bullion from Mocha; ivory, rhinoceros' horns and hides from Powahil; dates, cocoa-nuts, grain, and timber, from Malabar and Damaun. There is a considerable inland trade, by means of *charons* and other carriers with Marwar and Malwah.

MANDURIA, a town of Southern Italy, prov. Lecce, cap. cant., in an arid plain, 22 m. ESE. Taranto. Pop. 8,568 in 1862. It is a straggling but well built town, with wide unpaved streets, many handsome churches, several convents, an orphan asylum, and a large palace, formerly belonging to the Francavilla family. The town during the middle ages, and until 1790, was called Casalnuovo; but at the latter epoch it re-assumed, by royal privilege, the name of the ancient city, on the site of a part of which it is built. The remains of Manduria, destroyed by Fabius Maximus in the second Punic war, consist of its walls, standing several feet above ground, and double, except on the S. side, where the fortifications appear to have been left incomplete. The outer wall and its ditch measure 8 yards in breadth; behind this bulwark is a broad space, and then an inner wall, which together measure 14 yards. The walls are no where more than 6 ft. in height, having probably been lowered to furnish materials for the construction of the modern town. In the vicinity is a well, mentioned by Pliny as constantly preserving the same level, whatever quantity of water be added to or taken from it; '*lacus ad margines plenus, neque exhaustis aquis minuitur, neque infusis augetur.*' (Hist. Nat., lib. ii.) This singular well still exists.

MANFREDONIA, a sea-port town of Southern Italy, prov. Foggia, on a bay of the Adriatic, about 19 m. SW. the promontory (Testa di) of Gargano, and 20 m. NE. Foggia. Pop. 8,934 in 1862. Manfredonia, in point of symmetry, may vie with any town in Europe, having been constructed on a regular plan, which never underwent any alteration; and which, notwithstanding the unfinished state of some of the edifices, and the dilapidated aspect of others, gives it an air of grandeur and uniformity very remarkable. It is walled towards both land and sea: from the last a narrow ledge of rocks, almost always under water, divides its bulwarks. One long and wide street runs throughout the city, from one gate to the other; there are but two gates on the land-side, though two others open to the port, which is protected from the effects of the N. wind by a small mole, and commanded by a strong castle, defended by a ditch and drawbridge. The walls are fortified with large round bastions. The harbour is reckoned safe; but its want of depth renders it fit for small vessels only. Four streets run parallel with the principal thoroughfare, and are intersected at right angles by smaller ones. Though narrow, the streets are well kept; and the inhab. are both cleanly and industrious, in a degree not at all usual in S. Italy.

Vegetables and fish are good, plentiful, and cheap at Manfredonia, but water and wine are indifferent, as are oranges, which form an important article of commerce throughout Apulia. It exports considerable quantities of salt, obtained from the salt lagoons which border the coast of the bay to the S. of the town. It has also a trade in corn, considerable quantities of which are shipped from its port.

About a mile SW. of the town stood the ancient Sipontum, once a considerable city of *Magna Græcia*, and traditionally said to have been founded or colonised by Diomed. Its site is now principally occupied by a low marsh, abounding with wild fowl, and productive of the malaria which infects Manfredonia. The only remains of the ancient city are its cathedral and two columns of cipolino marble, both in a dilapidated condition. The former is a small Gothic edifice, with a handsome portico, but little adorned within. It is still the seat of an archiepiscopal see, founded in 1094. Sipontum, which was colonised by the Romans A.U.C. 558, had fallen into such irreparable decay in the 13th century, that Manfred, king of the Two Sicilies, having founded, in 1266, the town which bears his name, but which he called *Novum Sipontum*, removed thither the few inhab. of Sipontum, bestowing on them many valuable privileges and exemptions. But, though it has always enjoyed some commerce, Manfredonia never attained to the prosperity or celebrity of its ancient predecessor, and has long been stationary.

Digitized by Google

MANGALORE, or COREAL BUNDER, a sea-port town of Hindostan, prov. Canara, of which it is the cap., on a sandy promontory between salt lake and the Indian Ocean, 440 m. SSE. Bombay; lat. 12° 53′ N., long. 74° 57′ E. Early in the present century it had 30,000 inhab. The town is well built, and has a fort, now dismantled, which opposed a gallant and successful resistance to Tippoo, in 1783. The port does not admit vessels drawing more than 10 ft. water, except at spring tides; but there is good anchorage in the roadstead, in from 5 to 7 fathoms. The exports are chiefly rice, to Muscat, Goa, Bombay, and Malabar; betel nut, black pepper, sandal wood, cassia, and turmeric. Raw silk and sugar are imported from China and Bengal, and oil and ghee from Surat. Mangalore was at an early period much resorted to by Arabian traders, and most of its present inhab. are of Arabian descent. The vessels employed in its trade belong chiefly to other ports. Salt is made at Mangalore, but it is of bad quality.

MANILLA, (Sp. *Mañila*) a fortified sea-port city of the Philippine Islands, and the cap. of the Spanish settlements in the East, on the E. side of the Bay of Manilla, island of Luzon, and on the river Passig, about ½ m. from its mouth; lat. 14° 36′ 8″ N., long. 120° 53′ 30″ E. The pop. of the city and its suburbs was estimated at 102,000 in 1862. The inhabitants include, besides Tagalas, or natives, from 4,000 to 5,000 Spaniards and other Europeans, with Chinese, Negroes, the descendants of the foregoing races, and foreigners from all parts of the world. The bay and city of Manilla have a very picturesque and imposing aspect from the sea. The former is surrounded by mountains covered with verdure, which, on the E., decline gradually towards the shore. At their feet, on this side, is a small plain, on which the city stands; its buildings consisting almost entirely of the volcanic tufa, of which the plain and its vicinity are geologically constituted. Manilla comprises the city-proper and ten suburbs. The former is on the left or S. bank of the Passig, across which it communicates, by a handsome stone bridge of 10 arches, with its important suburb of Bidondo, and those of Tondo, and Santa Cruz. This bridge, which is about 149 Castilian *varas* (or yards) in length, by 8 in breadth, was founded in 1630; but it has been rebuilt since 1814, when it was for the most part destroyed by an earthquake. The city-proper, little more than 2 m. in circ., is surrounded with strong walls, and a broad ditch, and has not more than 10,000 or 12,000 inhab. At the mouth of the river is a small battery, and the town is further protected by the citadel of Santiago, near its NW. extremity; but Manilla could not make any effectual resistance to a European force. The city, which is entered by six gates, is regularly laid out; and is superior in point of appearance to either Lima or Santiago. The streets have carriage-ways, composed of a mixture of loam and quartz, and are provided with footpaths, and lighted at night. The houses in the city are solidly constructed, though, on account of earthquakes, they are seldom more than one story above the ground-floor. The houses in the suburbs, however, are not so substantial. In Bidondo, for example, they are almost wholly composed of bamboo, and are raised from the ground, to the height of 8 or 10 ft., on thick poles, as is customary among ultra-Gangetic nations. Most of the houses are furnished with balconies and verandahs; the place of glass in the windows is supplied by thin semi-transparent pieces of shell, which, though more opaque, repel heat-better. Bidondo is the most interesting portion of Manilla, and that in which its trade mostly centres. It is principally inhabited by Chinese and Tagalas, and looks very like a Chinese town.

The public edifices are mostly within the walled city. The new *aduana*, or custom-house, is a large fine building, constructed at a great expense; but its size is out of all proportion to the business to be transacted in it. The residence of the captain-general and the principal government offices are also in a large edifice, occupying one of the sides of the *Plaça Mayor*, or principal square. This square measures about 100 yds. either way, and has, in its centre, a bronze statue of Charles IV., on a marble pedestal, presented to the city by Ferdinand VII., in 1824. There are, in Manilla, a vast number of churches and ecclesiastical establishments; and the number of clergymen is said to exceed that of the garrison, which is estimated at about 7,000 men. The city was erected into an archbishopric in 1598, and the cathedral and archbishop's palace are among its most conspicuous structures. The Augustine, Franciscan, Dominican, and Jesuit convents, the arsenal and cannon foundry in the citadel, the university (founded in 1645), the missionary college, the various schools for natives and Europeans, the hospitals, orphan asylums, and other charities, and the royal cigar manufactory, in which 350 males and 2,000 females are said to be employed, include the other principal public buildings and establishments. The promenades round the city are frequented in the evening by the more opulent classes, on horseback, or in their carriages. The neighbourhood is interspersed with orange, areca, tamarind, and mango groves; gardens; coffee, cocoa, and cotton plantations; and rice grounds.

The Passig is navigable for vessels of 600 tons in ballast, or for laden vessels of from 250 to 300 tons, as far as the bridge; and for large shallow boats, drawing from 2 to 3 ft. water, as far as the lake in which it rises, about 9 m. inland. There are 13 ft. water, at low ebb, in the channel through the bar at the entrance of the river; for the further deepening of which a steam-dredging boat has been employed since 1837. The rise and fall of the tide in the river is from 2 to 3 ft. A light-house, at the end of the pier, marks the entrance of the Passig on the left-hand side. Ships of all sizes anchor in Manilla roads, at from 1 to 2 m. off shore, except during July, August, and September, when the SW. monsoon throws in a heavy sea, which extends quite to the entrance of the river. At this season, therefore, small vessels must load and unload in the river, and large vessels at Cavité, an anchorage sheltered by a neck of land to the SW., and about 6 or 7 m. by water from the mouth of the river; their cargoes being conveyed, to and from Manilla, in secure decked boats, of from 50 to 70 tons burden.

Manilla is the only port in the Spanish Philippines with which Spanish vessels to or from Europe, or foreign vessels from any quarter, are allowed to trade. Spanish vessels trading to China and Singapore are, however, allowed to proceed to various outports, and there take on board their outward cargo. The principal articles of export are sugar, which is by far the most important; hemp, and stuffs made of hemp; rice, of which large quantities are sent to China; indigo, sapan and other woods, tobacco, cigars, coffee, cotton, tortoise-shell, hides, and ebony. The tobacco of the Philippine Islands is excellent, and might be produced in any quantity; but its growth is comparatively limited by its being made a government monopoly. (See PHILIPPINE

Digitized by Google

Islands.) The greatest portion of the foreign trade of Manilla is in the hands of the U. States.

The port charges on foreign vessels consist of a tonnage-duty of 2 reals, or a quarter-dollar, per register ton; and fees, varying from 15 to 20 dollars, according to the size of the vessel, for port-captain's and health officers' visits, and passport. The tariff is based on a custom-house valuation, fixed every five years. Most foreign commodities, imported in foreign vessels, pay an import duty of 14 per cent. *ad valorem*, except wines and spirits, which mostly pay a duty of from 30 to 60 per cent., unless the produce of Spain. Cotton-twist of certain colours, cutlery, ready-made clothes, European fruits, confectionery, and vinegar, pay 40 per cent. if imported in Spanish vessels, and 50 per cent. if in any other. British and other foreign cotton and silk manufactures made in imitation of native cloth, Madras and Senegal cottons, pay 15 per cent. if imported in Spanish, and 25 per cent. if in other ships. Machinery of all sorts for the promotion of industry, cotton-twist of certain colours, gold and silver, plants and seeds, are imported duty free; but tropical products, the same as those of the Philippines, gunpowder, swords, and other warlike stores, are prohibited, unless landed in bond for re-exportation. Exports of nearly all descriptions, by Spanish vessels, pay only from 1½ to 2 per cent. *ad valorem*, and by foreign vessels double this duty; but manufactured tobacco, rope from Manilla, hemp, and gold and silver, coined or uncoined, if exported to Spain, go duty free.

The principal currency of Manilla consists of Spanish dollars, of 8 reals and 96 grains; but S. American dollars are also current. The weights in use are the Spanish lb., which is nearly 2 per cent. heavier than the English; the arroba = 25½ Eng. lbs. nearly; the quintal = 102 lbs.; and the picul of 5 arrobas, or 1¼ cwt. Eng. The coyan is a measure for rice, &c., varying from 96 to 135 lbs. According to a recent list, there are in Manilla 47 Spanish merchants and 11 foreign firms. The Spanish merchants have a chamber of commerce and a joint-stock insurance society. The U. States, France, and Belgium have consuls, and each of the Canton marine insurance companies has an agent here. There are, however, neither fire nor life offices nor agencies; nor is any newspaper, price-current, or other periodical publication issued in Manilla.

Manilla existed as a native town prior to the Spanish invasion; it was taken by the Spaniards, and made the cap. of their E. dominions, in 1571. It has frequently suffered very much from earthquakes, especially in 1645 and 1762 and 1824. In 1762, it was taken by the English; but ransomed by Spain for 1,000,000*l.* sterling.

MANNHEIM, or MANHEIM, a town of W. Germany, grand duchy of Baden, lower circ. of the Rhine (*Unterrheinkreis*), of which it is the cap., on the Rhine, where it is joined by the Neckar, 32 m. N. Carlsruhe, and 37 m. SSE. Mayence, on the railway from Mayence to Carlsruhe. Pop. 27,172 in 1861. The town was once strongly fortified, and has at different times suffered severely from sieges and bombardments; but towards the end of last century its defences were levelled by the French, and their site is now laid out in gardens and public walks. Mannheim is a regularly-constructed, handsome town, though it is somewhat monotonous and tiresome. It consists of 11 streets, crossed at right angles by 10 others, all perfectly straight, broad, well paved, and equidistant; and its houses being uniform, it is difficult for any one, not resident, to distinguish one part of the town from another. It has several handsome public squares, which, though the town be deficient in *good* water, have mostly fountains. The spacious *Parade-platz* and the *Planken*, or principal thoroughfare, both planted with trees, afford pleasant promenades. The principal public edifice is the palace, a huge structure of red sandstone, built by the elector palatine when he made Mannheim his cap., in 1720, but more remarkable for size than elegance. In one wing are museums of antiquities and natural history, the picture-gallery, with some fine Dutch and Flemish paintings, collections of plaster casts and engravings, and a library, said to consist of 70,000 vols.; but the other wing, comprising the old theatre, was mostly laid in ruins during the bombardment of Mannheim in 1795, in which state it remains. The new theatre, a handsome fabric, is neatly fitted up, and is rich in scenic decorations: it has one of the best theatrical companies and orchestras of Germany; and is celebrated as being the place at which Schiller's tragedy of the Robbers was originally produced. Opposite the theatre is the house in which Kotzebue was assassinated. Mannheim has about an equal number of Lutheran and Rom. Cath. churches, of which that formerly belonging to the Jesuits is the finest. It has also a synagogue, an observatory, with a tower 115 ft. high, and a good collection of instruments, an arsenal and cannon foundry, an exchange, surrounded by arcades, several hospitals, a savings' bank, a lyceum, with schools of drawing, painting, sculpture, and surgery. The Rhine is bordered by a fine terrace in the spacious grounds belonging to the palace, whence an extensive view of the surrounding country is obtained; and, like the Neckar, is crossed by a bridge of boats. Mannheim has some public baths, and a club called '*The Harmony*,' with a reading-room. The cheapness of living has attracted a good many English residents.

This town is the seat of the supreme court of justice for the grand duchy, and of one of the four subordinate courts of appeal in Baden. It was formerly a manufacturing town of some importance; and, among other articles, trinkets, of a compound called Mannheim-gold, were made in large quantities, but this branch of industry is nearly extinct. It still, however, produces carpets, linen and silk goods, tobacco, liqueurs, starch, glue, pasteboard, and sealing wax; and has several coach-building establishments, tanneries, breweries, and bleaching-grounds. Its neighbourhood produces hops and garden stuff in large quantities; and, besides its traffic in cattle and agricultural products, it has a considerable transit trade by the Rhine and the Neckar. Previously to 1606, when it was fortified by the elector Frederick IV., Mannheim was a mere village. It soon after received numerous Flemish and other immigrants. In 1777, it was ceded to Bavaria; but, since 1802, has been again united to Baden.

MANRESA (*Minorisa*), a town of Spain, prov. Catalonia, 34 m. NW. Barcelona. Pop. 15,169 in 1857. The town stands on a rocky height, in the midst of a country irrigated by the Llobregat and its tributaries; is walled and strongly fortified; has good streets, and comprises among its public buildings and establishments, a collegiate church, with a chapter, four parish churches, five oratories, a well endowed asylum for female orphans, infantry barracks, free school, and hospital. The inhab. rank among the most industrious in Catalonia, and are equally divided between agriculture and manufacturing pursuits. Cotton and silk fabrics, cotton thread, fine broad cloths, tapes and ribands, paper, brandy, and gunpowder, are made

Digitized by Google

in considerable quantities for exportation to Cuba and the W. Indies. The neighbouring district, one of the best cultivated in Spain, produces corn, hemp, oil, and wine, which, with the goods above mentioned, find a ready sale at the weekly markets, and the two fairs held here September 1 and November 30.

MANSFIELD, a market town and par. of England, co. Nottingham, in the N. div. of wap. Broxtow, 13 m. NNW. Nottingham, and 118 m. N. by W. London, on the Midland railway. Pop. of town 8,346, and of par. 10,225 in 1861. The town is situated in the forest of Sherwood, near the small river Mann, from which it takes its name; and, though old-fashioned, and irregularly laid out, it contains many good modern houses, and is paved and lighted with gas. The chief buildings are the moot-hall, a structure well adapted for county meetings; a theatre, and the church, a commodious Gothic edifice, containing some curious monuments, and fine specimens of painted glass. The Presbyterians, Wesleyan and Calvinistic Methodists, and the Society of Friends have their respective places of worship, to which, as well as the church, are attached well supported Sunday schools. A grammar-school was established here in 1567, by Queen Elizabeth, who endowed it with ¼ part of the church-land of the par., and founded for it two scholarships, of 10*l.* each, at Jesus College, Cambridge. There are two other charity schools: one of which was founded in 1725, for teaching and clothing 20 boys and 20 girls, and for paying apprentice fees with the former. Besides the above, there are several other charities and money-bequests. The inhabitants are chiefly engaged in the hosiery and lace trade, and in cotton spinning. There are some large iron foundries, for light castings; and the town has also a considerable trade in corn and malt, as well as in the valuable building-stone, quarried in its vicinity. Petty sessions for the hund. are held here, and it is the election-town for the N. division of the co. Markets on Thursday; large cattle fairs, 5th April, 10th July, and the second Thursday in Oct.

About 1½ m. from Mansfield is the village and township of Mansfield-Woodhouse—pop. of par., 2,263 in 1861—near which are some curious remains of two Roman villas. Within a few miles are Worksop Manor, formerly the property of the Duke of Norfolk; Clumber the seat of the Duke of Newcastle; Thoresby, of Lord Newark; and Welbeck, of the Duke of Portland. Hence, in popular language, this part of the county is called the dukery.

MANS (LE) (an. *Suindinum* and *Cenomania*), a town of France, dép. Sarthe, of which it is the cap., on the Sarthe, here crossed by three bridges, 50 m. NE. by N. Angers, and 120 m. SW. Paris, on the railway from Paris to Nantes. Pop. 37,209 in 1861. The town stands partly on the declivity of a hill, and partly beside the river. The latter portion is very ill-built, and has narrow crooked streets, impassable for carriages; but the upper town, though irregular, is open, and tolerably well built, its houses being of stone, roofed with slate. A handsome new quarter has been laid out, having a large square in its centre; and there are two good public promenades, one along the bank of the Sarthe. The Romans surrounded the ancient city with walls, a portion of which on the NNE. side, remains nearly perfect; but the modern town is of no strength. Le Mans has several remarkable ecclesiastical structures. Its cathedral, begun in the 9th, but not finished till the 16th, century, is a fine Gothic edifice, 416 ft. in length, with a large square tower, 212 ft. in height, the supports of which in the interior are ornamented with numerous statues. The choir is inferior in elegance only to that of Beauvais; and the stained glass window in the S. arm of the cross is much admired for its richness. The church of St. Julian is an interesting edifice of the 11th century. Another church, built in the 13th century, presents a combination of the Gothic and antique style. The new prefecture, the town-hall, and the theatre, are handsome buildings. Le Mans has two hospitals, a seminary, with a library of 15,000 vols., a public library, with 45,000 printed vols. and 500 MSS., in excellent preservation; several other libraries, museums of natural history, antiquities, and painting, the latter having several works by Guido, A. Durer, Teniers, and Vandyk; a royal society of arts, a communal college, schools of drawing and midwifery. It has manufactures of linen and coarse woollen stuffs, and wax candles; and a considerable trade in these, and in rags, iron, salt, wine, brandy, and agricultural produce. Le Mans has suffered much from the ravages of war at different periods, and, in 1793, it was the scene of the last struggle between the Republic and Vendean forces.

MANTINEIA, a celebrated city of ancient Greece, in Arcadia, the ruins of which, close to the small hamlet of *Palaiopoli*, in a marshy plain watered by the Ophis, and enclosed SE. by the rugged heights of Parthenion and Artemisium, are about 7 m. N. Tripolizza, and 17 m. W. by S. Argos. The walls, probably built soon after the battle of Leuctra (B.C. 371), are similar to those of Messene, and enclose an oval space in which the city stood; they have square towers, and the whole exhibits an interesting specimen of Grecian fortification. A ditch, or fosse, round the walls is supplied by the Ophis; which, at certain seasons, would inundate the plain were it not absorbed by a chasm (*καταβαθρον*), through which its waters find a subterranean vent. Mantineia had eight temples, besides a theatre, stadium, hippodrome, and several other monuments enumerated by Pausanias. (Arcadia, ch. 8–11.) Some imperfect remains of the theatre are still visible, but no other ancient building can be identified; and every thing, except the enclosing walls, is in a state of total dilapidation.

Mantineia is wholly indebted for its long-continued celebrity to the great battle fought in its vicinity, *anno* 362 B.C., between the forces of Sparta and Thebes, and their allies; in which Epaminondas, the leader of the Thebans, and the most illustrious, perhaps, of all the warriors of Greece, fell in the moment of victory. Xenophon is very brief in his account of the battle; but it may be collected from his statement that, on the whole, the plan of the Theban general succeeded in all its parts. The charge of the Theban and Thessalian cavalry, which commenced the attack, was completely successful and prepared for the deeper impression made by the column of Theban and Arcadian infantry. But, in the critical moment, when the phalanx of the Lacedæmonians had been broken, and a decisive victory appeared to be secured, Epaminondas received a mortal wound; and, being carried to a rising ground, whence he might view the scene of combat, would not allow the weapon to be extracted till assured that the victory had been won, when he almost immediately expired. But his fall, and the consternation thence arising, paralysed the successful army. They kept the ground they had gained, but did little or nothing more. Hence it was that the result of this great contest disappointed the expectations of those who had supposed that it would be decisive

Digitized by Google

of the fate of Greece. 'The gods,' says Xenophon, 'decided otherwise. Each party claimed the victory, and neither gained any advantage; territory, town, and dominion was acquired by neither; but indecision, trouble, and confusion, more than ever before, prevailed throughout Greece.' (Xen. Hell. l. vii. c. 5. *ad finem.*) This, however, is the statement of a partisan of Sparta, and is not quite fair. The Theban confederacy was, on the whole, decidedly successful. They effectually broke the power and humbled the pride of Sparta; and, by re-establishing the independence of the Missenians, the old and inveterate enemies of the Lacedæmonians, they obtained a new guarantee against any dangerous increase of their power in future. (See Mitford's Greece, sect. viii. cap. 28.)

Mantineia was taken and sacked by Antigonus during the wars of the Achæan League; and its name was changed, in honour of the conqueror, to Antigonia, which it retained till the time of Adrian, who restored its original appellation.

MANTUA (Ital. *Mantova*), a fortified town of Austrian Italy, cap. deleg. Mantua, on both sides the Mincio, 21 m. SSW. Verona, and 37 m. E. by N. Cremona, on the railway from Verona to Reggio. Pop. 30,170 in 1858. Its situation is peculiar, being in fact nearly surrounded by lakes, partly natural, and partly formed by damming up the waters of the river. The mounds, or dams constructed for this purpose, are sometimes called bridges, from their being perforated with arches, to allow the superfluous water to escape; and by these the town is connected with the *Borgo di Fortezza*, or strong citadel of Porto on the N., and with the *Borgo di San Giorgio*. The latter, as well as the town itself, is surrounded by strong walls: to the SE. is the outwork of Pradelba, and to the S. the fortified island of Cerese, or T, from its alleged resemblance to that letter. The fortifications, though not imposing in their appearance, are very strong, and kept in excellent order; and their strength and the position of the place render it one of the bulwarks of Italy. Mantua has some good streets and squares, but, on the whole, it is ill-built and dirty. Many of the inhabs. live in cellars, its pop. has declined, and it has a decayed appearance. Its best part is the Piazza Virgiliana, a large square, surrounded with trees, and open to the lake. The climate is subject to great extremes, and in summer the exhalations from the surrounding swamps make it very unhealthy; though, of late years, the Austrian government has exerted itself, by draining part of the marshes, and opening a passage for the stagnant waters, to lessen its insalubrity. Several of the public edifices in Mantua were designed or adorned by Giulio Romano. But the cathedral, planned by that great artist, is a bad imitation of the church of Santa Maria Maggiore, at Rome; it has double ranges of side isles, and the columns stand very wide apart. The church of St. Andrea, begun in 1470, but not completed till 1782, was designed by Alberti, and is very superior to the cathedral, considered, indeed, one of the handsomest churches in Italy: it has fine statues of Faith and Hope, by Canova. The old ducal palace (*Palazzo Vecchio*) is a large imposing building; and, were it perfect, would be one of the finest palaces in Europe. It is beautifully floored with porcelain, and was formerly splendidly adorned with Flemish and Mantuan tapestry and rich furniture; and, though repeatedly despoiled, it has still to boast of a room painted in fresco, by G. Romano. But the most celebrated fresco of Romano, 'the Fall of the Giants,' is in the palace of the T. At the extremity of one of the bridges is a handsome gateway, attributed to Romano, who also erected the open arcade on the bridge over the Mincio, in the heart of the city. Romano inhabited a house opposite the church of St. Barnabas, in which is his tomb. There are numerous convents, a Jews' synagogue, a civil hospital, two orphan asylums, a *monte-di-pietà*, a workhouse, an asylum for 50 poor Jews, an arsenal, cavalry barracks, a large prison, a new and a summer theatre, an imperial academy of arts and sciences, a lyceum, a gymnasium, a public library with 80,000 vols. and many MSS., attached to which are a museum and a fine gallery of sculpture, which has a celebrated bust of Virgil, a botanic garden, and various other scientific and literary institutions. Mantua is a bishop's see, the residence of an Austrian delegate, and the seat of the council, and civil, criminal, and commercial tribunals for the delegation. In the days of her prosperity, and when governed by her own dukes, Mantua is said to have had a pop. of 50,000, and extensive manufactures: and though the latter be greatly fallen off, she still produces limited quantities of silk, woollen, and linen fabrics, with leather, parchment, paper, cordage, and carriages and boats for the navigation of the Po.

Mantua is very ancient, her foundation being probably antecedent to that of Rome. She derives her principal celebrity from her being the native country of Virgil, that great poet having been born in her immediate vicinity, *anno* 70 B.C.

> 'Mantua Musarum domus, atque ad sidera cantu
> Evecta Adulo, et Smyrnæis æmula plectris.'
> Silius Italicus, lib. viii. lin. 595.

Mantua appears, from the contrast, in the first Eclogue, between her and Rome, not to have been a place of so much importance in Virgil's time; and Martial applies to her the epithet of *parva*. (Ep. xiv. 193.) Her unlucky vicinity to Cremona made her territory be divided among the veterans of Augustus. (See art. CREMONA, in this work.)

After the conquest of N. Italy by Charlemagne, Mantua became a republic, and continued under that form of government till the 12th century, when the Gonzaga family acquired the supreme direction of its affairs. They were subsequently raised to the title of dukes, and held possession of Mantua till 1707, when it was taken by the Austrians. Under the French, it was the cap. of the dep. of the Mincio.

MANZANARES, a town of Spain, prov. La Mancha, 24 m. E. by N. Ciudad Real, and 100 m. S. Madrid. Pop. 10,275 in 1857. The town stands in the loftiest and bleakest part of the prov., on the high road between Madrid and Seville. A par. church of Gothic architecture, a castle, hospital, and cavalry barracks are the only public buildings; the private houses are better built than in most towns of Spain. The inhab. are chiefly employed in the production of saffron, for which the neighbourhood is celebrated, and of the Valdepeñas wine, highly esteemed all over Castile; the only other branches of industry being the manufacture of coarse woollens and linens for home supply. Not far from Manzanares are the ruined walls and tower of the ancient *Murus*; a city described, in Antonine's *Itinerary*, as being on the road from *Laminium* (Alhambra) to *Toletum* (Toledo).

MANZARES, a small river of Spain, tributary to the TAGUS, and flowing by MADRID, which see.

MARACAYBO, MARACAIBO, or NUEVA ZAMORA, a fortified city of Venezuela, cap. dep. Zulia, and prov. Maraycabo; on the W. shore of the strait connecting the lake of Maracaybo with the sea; 175 m. ESE. Santa Marta, and 320 m.

Digitized by Google

W. by N. La Guayra. Lat. 10° 39′ N., long. 71° 45′ W. In 1801, its pop., including a number of Spanish refugees from St. Domingo, was estimated at 24,000; and it may still, perhaps, amount to 20,000. It stands on an arid and sandy soil, partly on the shore of a small inlet of the strait, and partly on a tongue of land which projects into it. Several of its houses are built of a compound of lime and sand, without stone, but they are nearly all thatched with reeds; and, as the greater number consist wholly of reeds and straw, the town has a mean appearance, and is very subject to fires. A handsome par. church, a chapel, a Franciscan convent, and a hospital are the only public buildings of which modern travellers make mention. The harbour of Maracaybo, within the bar at the entrance of the straits, has deep water; and is defended by the 3 castles of San Carlos, Zapara, and Bajo Seco, situated on the islands of the same names, among the shoals forming the bar. The *Bajo Seco*, or dry shoal, is in advance of the other islands; and the best channel to the harbour, on the NW. side, has 13 ft. water. The climate of Maracaybo is oppressively hot; during a part of the year water is scarce; and in the summer, when violent thunder storms and earthquakes occur, the city often suffers greatly from very heavy rains. This port has superior facilities for ship-building, and its shipwrights have produced some fine schooners. A brisk traffic is carried on with the interior by the numerous vessels which navigate the lake. The inhabs. are said to be good sailors, and they have generally a taste for a seafaring life. Many, however, devote themselves to the care of cattle, large herds of which are reared in the vicinity.

MARACAYBO (LAKE OR LAGOON OF), a large lake, or inlet of the sea, in the N. part of S. America, repub. Venezuela, dep. Zulia, prov. Maracaybo. It extends between lat. 9° 5′ and 10° 30′ N., and long. 71° and 72° 20′ W., and is of an oval, or rather 'decanter-like' shape; communicating, at its N. extremity, with the Gulf of Maracaybo, by a strait nearly 20 m. in length, and varying in breadth from 5 to 10 m. Length of the lake, N. to S., nearly 100 m.; greatest breadth, about 70 m.; circ. probably about 250 m. Inside it has water enough to float the largest vessels; and, being easily navigated, serves for the conveyance to Maracaybo of the produce of the interior intended for consumption in, or exportation from, that city. But a shifting bar, at the mouth of its strait, where it unites with the sea, in lat. 11° 2′, having only 14 ft. of water, renders it inaccessible to large ships. It receives several considerable rivers, so that its waters are perfectly fresh, sweet, and fit for drinking, except in the spring, when strong N. winds impel inwards a swell from the gulf, which renders them brackish. The lake is not very subject to violent tempests. It abounds with fish and waterfowl; but tortoises, elsewhere so common in Columbia, are not met with in it. Its banks are in many parts sterile, and only cultivated on the W. side; and they are, in general, so unhealthy, that the Indians prefer mounting their huts on iron-wood-posts in the water, to fixing them on the shore. It was from the Indian villages or towns, built in this way, that the whole country is said to have derived from the Spaniards the name of Venezuela, or Little Venice. Four of these towns are still standing on the E. part of the lake, at unequal distances from each other; the iron-wood on which they are founded having become a mass of stone, from the petrifying quality of the water. (Geog. Account of Columbia, i. 216, 217.)

Towards the NE. border of the lake is a remarkable mine of asphaltum (*pix montana*), the bituminous vapours of which are so easily inflamed that, during the night, phosphoric fires are continually seen, which, in their effect, resemble lightning. It is remarked that they are more frequent in great heat than in cool weather. They go by the name of the 'Lantern of Maracaybo,' because they serve for lighthouse and compass to the Spaniards and Indians, who, without the assistance of either, navigate the lake.

MARAGA (an *Gamarga ?*), a city of Persia, prov. Azerbijam, 50 m. S. by W. Tabreez, and 305 m. WNW. Teheran. Pop. 15,000. It is a well-built walled town, in a low valley, at the extremity of a fertile plain, opening to the lake Urumea, which lies 10 m. W. Maraga. The chief buildings are a large and handsome bazaar, spacious public baths, and the tomb of Holaku, one of the most able princes of the dynasty of Jenghiskhan. Maraga is also celebrated for its beautiful and highly productive gardens and plantations, watered by canals drawn from a small river, over which are two bridges erected in the 11th century. The town has a large manufactory of glass, but the inhab. are chiefly employed in the cultivation of the fertile country round the town.

On the top of a mountain rising behind Maraga are the remains of an observatory, built by Holaku, for the use of Nazer-a-Deen, one of the most famous Oriental astronomers; and at the foot of the hill are several cave-temples, similar in form, though not equal either in size or beauty, to those of Hindostan.

MARANHAM, or SAN LUIS, a city and seaport of N. Brazil, cap. of the prov. Maranham, on the W. coast of the island of the same name, in the bay of Marcos, 300 m. E. by S. Para. Lat. 2° 31′ 30″ S., long. 44° 16′ W. The pop. of the city has varied but little within the present century, and was estimated by Mr. Hill, British consul (Consular Reports), at 25,000 in 1860. About two-thirds of the pop. are negroes, and the remainder Portuguese, Brazilians, and a very few English. The city is built on unequal ground, extending inwards about 1½ m. from the water's edge. It is laid out in a straggling manner, with numerous squares and broad streets, the latter being only partially paved. There are many neat and good-looking houses; the better sort consist of a ground-floor and a story above, the lower part being usually employed as a shop and lodging for servants, and the upper as the apartments of the family. These houses have mostly balconies, and are handsomely fitted up. In the poorer and unpaved streets the houses consist of only a ground-floor, and having thatched roofs and unglazed windows, their appearance is extremely mean and shabby. Adjoining the shore is an open space, one side of which is nearly taken up with the governor's palace, town-hall, and prison, which occupy a long, uniform, and handsome stone building, of one story in height; another of its sides is occupied by the cathedral. This, which was formerly the Jesuits' church, is said to be the finest of any in the maritime cities of Brazil, except that of Para. The Jesuits' college is now the episcopal palace. There are a great number of other churches and convents, a treasury, two hospitals, various public schools, and a custom-house. The trade of the place, which was formerly of some importance, has greatly decreased in recent years. The British shipping, which from 1830 to 1840 averaged forty vessels a year, fell to half that number in the years 1858-63. The chief exports are cotton, sugar, and rice.

The harbour of Maranham is rather difficult of

Digitized by Google

access. It is usual for vessels arriving on the coast to make the light-house on the island of St. Anna, about 40 m. NE. Maranham. The harbour of the latter consists of a narrow creek, defended by some indifferent forts. It is so beset with shoals and islets, as to render a pilot always necessary, but with such there is no real danger. It has about 18 ft. water at low ebb; but it is said to be filling up, and that the probability is that the port will, at no very distant period, be transferred to Alcantara, on the opposite side of the bay. The latter, indeed, is in all respects a preferable port, being more easily accessible, having deeper water, and greater facilities for getting to sea. The island of Maranham is fertile, and densely peopled; having a number of villages, which uniformly consist of four large timber huts, from 300 to 500 paces in length, and about 20 or 30 ft. in depth, each capable of accommodating from 200 to 300 inhab. The city was founded by the French in the early part of the 17th century.

MARAZION, or MARKET-JEW, a decayed bor., sea-port, market town, and township of England, St. Hilary par., co. Cornwall, E. div. of hund. Penurth, 42 m. SSW. Bodmin, and 252 m. W. by S. London. Pop. 1,545 in 1861. The town is situated on the shore of St. Mount's Bay, on the side of a hill, which shelters it from the cold N. winds. The par. church is 2 m. distant; but it has a chapel of ease, and places of worship for Wesleyan-Methodists and other dissenters. An endowed school is held in the guildhall; a national school and three Sunday schools furnish instruction to the children of the poor: and there are a few charities. Its principal trade consists in the importation of timber, coals, and iron, for the supply of the town and neighbouring mines. The market, held on Saturday, is well supplied, especially with ready-made shoes; and 2 large cattle fairs are held 3rd Thursday in Lent and Sept. 29.

Though a bor. by subscription, this town was chartered by Queen Elizabeth; the corporate officers being a mayor and 8 aldermen, with 12 cap. burgesses, whose privileges were not interfered with by the late Mun. Reform Act. It is supposed to have sent mems. to the H. of C. at a former period, but certainly not subsequently to 1658. Its name, Market-Jew, has been supposed to be derived from its having been, in the period of its prosperity, a great trading place for the Jews; but the presumption is unsupported by history, and it appears more rational to conclude that it is a corruption of its ancient name Marghasyon, or Marghasiewe.

MARBELLA (an. *Salduba*), a sea-port town of Spain, in Andalusia, prov. Malaga, 30 m. SW. Malaga, and 38 m. NE. Gibraltar. Pop. 4,870 in 1857. The town stands slightly elevated above the sea, and its turreted walls and narrow streets declare it to be thoroughly Moorish. The town is particularly clean, and respectably inhabited; the fishing portion of the pop. being located, more conveniently for their occupation, in a large suburb on its E. side. A church, two hospitals, and an old Moorish castle are its principal public buildings. The trade of Marbella is only trifling: its valuable mines of lead and iron, which formerly secured for it a certain degree of prosperity, have been for many years totally abandoned, its sugar-refinery and tan-yards have disappeared, and fishing now forms the chief occupation of the inhabs. There is no harbour; but vessels find excellent holding-ground, in deep water, near the shore. The landing also is good, on a fine hard sand; and a small pier has lately been constructed.

MARBURG, a town of Hesse Cassel, cap. circ. Upper Hesse, on the Lahn, a tributary of the Rhine, 50 m. SW. Cassel, and 58 m. NE. by E. Coblentz, on the railway from Cassel to Frankfort. Pop. 8,723 in 1861. The town is built on the slope of a hill, crowned by a ruined castle; and has narrow and dirty streets and indifferent houses. Its only building worth notice is the church of St. Elizabeth, an elegant edifice, and one of the earliest existing specimens of the pointed Gothic style, having been commenced in 1235, and finished within the succeeding 48 years. The tomb of St. Elizabeth, in this church, has been long resorted to by pilgrims, and was formerly adorned with numerous gems and articles of value, mostly carried off by the French in 1810. In the transept are several curious monuments of the landgraves of Hesse. The university of Marburg, founded in 1527, has 40 professors, and a good library of 70,000 vols. Marburg has also the Wilhelm's Institute, a school of surgery; and a philological seminary, teachers' seminary, botanic garden, school of veterinary medicine, Lutheran and Catholic orphan asylums, a workhouse, and a free-school of industry. The inhab. derive their principal support from the university, and from the manufacture of linen fabrics, stockings, hats, tobacco, and tobacco-pipes, &c. It is the seat of the chief judicial and other state establishments for Upper Hesse.

MARBURG, a town of the Austrian empire, being, next to Grätz, the principal in the prov. of Styria, cap. circ. on the Drave, and on the railway from Grätz to Laybach, 36 m. SSE. the former city. Pop. 8,240 in 1858. The town is surrounded by a beautiful country, richly planted with vines. The climate here is far more congenial to their growth than on the N. side of the hills, and excellent wine is produced. Marburg has three suburbs, an old castle, a church, in which are several good pictures, a hospital, theatre, gymnasium, military school, and swimming school. It is the seat of the council for the circ., furnishes leather and rosoglio, and has some trade in corn, wine, and iron; but its inhab. derive their chief subsistence from the active transit trade between Hungary and Croatia and Illyria.

MARCH, a market town, township, and par. of England, belonging to Doddington par., Isle of Ely, hund. Witchford, on the Old Nen, 13 m. NW. Ely, and 74 m. N. London. Area of township, 20,440 acres. Pop. 3,600 in 1861. Excepting the church, which is large and handsome, the town contains nothing worthy of remark; the streets being generally narrow, and the houses, for the most part, low and meanly built. Its situation on the Nen, which is navigable, makes it the centre of a considerable trade; corn, hemp, flax, and cheese being shipped here, and coal, timber, and London goods imported. Markets on Friday; fairs, Monday before Whitsuntide, Whit-Monday, and 3rd Tuesday in Oct., chiefly for horses, cattle, and cheese.

MARENGO, a village of N. Italy, prov. Alexandria, near the Bormida, in an extensive plain, 3½ m. E. by S. Alexandria. This village will be ever memorable for the great battle fought here, on the 14th of June, 1800, between the French under Napoleon, and the Austrians under Melas. Napoleon, believing that the Austrians had withdrawn from the neighbourhood of Marengo, had, on the day previously to the battle, despatched Dessaix with a strong corps to Rivolta. By this means, his army was reduced, when attacked by the Austrians on the following morning, to little more than 20,000 men, whereas the Austrians had nearly 40,000 troops in the field. The contest was most obstinate and bloody; but, despite a desperate resistance, the Austrians carried the village of

Digitized by Google

Marengo, broke the left wing of the French, and compelled them to retreat. But, at this critical moment, when the fate of the day appeared all but decided, Dessaix, who had returned by a forced march, came upon the field. This gave the French new strength, and inspired them with new courage. The Austrians, exhausted by their previous efforts, were immediately attacked at all points, forced back, and completely defeated, with the loss of all their cannon and baggage, and of a vast number of men left dead on the field and taken prisoners. Dessaix, whose opportune arrival turned the fortune of the day, was killed, charging at the head of his division.

MARGARITA, an island off the N. coast of S. America, belonging to the repub. of Venezuela, and attached to the dep. Cumana. It lies in about lat. 11° N., and long. 64° W., separated from the continent by a channel, 20 m. in width, through which all ships coming from Europe, or windward of Cumana, Barcelona, or La Guayra, must pass in going to those ports. Length of the island, E. to W., 37½ m.: breadth varying from 5 to 20 m. Pop. estimated at 15,000. Viewed at a short distance from the N. it appears like two islands, there being a tract of low swampy land in its centre, which is in some parts not more than from 10 to 12 ft. above the level of the sea; but other parts of the island rise to a considerable elevation; and Maranao, near its W. extremity, a mountain of micaceous schist, is upwards of 2,000 ft. in height. The coast-lands are arid and barren; but the interior is comparatively fertile, producing maize, bananas, and various fruits, with sugar, coffee, cocoa, and other W. Indian products, though not in sufficient quantities for the demands of the inhab. A good deal of poultry, and other live stock, is reared, and exported to the continent; and Margarita has an active fishery, and some salt-works. It was formerly much celebrated for its pearl-fishery; but this has greatly declined, and the pearls now found are said to be of inferior size and quality. The pearl-fishery was principally conducted at the rocky island of Coche, between Margarita and the main land. The inhab. have some manufactures of cotton stockings and hammocks, of very good quality. Assumpcion, the cap., and residence of the governor, in the centre of the island, is pretty well built. There are three sea-port towns or villages; one of which, Pampatar, on the SE. coast, has a pretty good harbour, with anchorage in 7 or 8 fathoms water. This island, which is of little value in any other point of view, might, were it occupied by a European power, be of considerable service as a depôt for the supply of the adjacent continent. It is better situated for such a purpose than Trinidad. It was discovered by Columbus in 1498.

MARGATE, a munic. bor., sea-port town, and much-frequented watering-place of England, co. Kent, in the Isle of Thanet, lathe St. Augustine, 16 m. ENE. Canterbury, 65 m. E. London by road, and 73¾ m. by London, Chatham, and Dover railway. Pop. of bor. 8,874, and of par. 10,019 in 1861. Area of par. 3,810 acres. The town is finely situated, partly along the shore, and partly on the declivities of two hills, one of which presents a bold cliff towards the sea. The older streets are narrow and irregular, lined with inferior-looking houses; but in the upper parts and outskirts of the town are several handsome streets and squares formed by houses which for size and regularity of construction would not disgrace the metropolis. The whole is well paved, lighted with gas, and plentifully supplied with good water. The town-hall and market-house is a plain but substantial building of recent erection, supported on cast-iron pillars, and fronted by a Tuscan portico. The 'Hall-by-the-Sea,' a large concert room, opened in July, 1866, and the assembly-rooms in Cecil-sq. are among the most elegant places of amusement to be found at the English 'sea-side;' there is also a neat theatre in Hawley-sq. Numerous bathing-houses line one side of High-st., and near the Parade, E. of the town, is a very complete establishment formed in the cliff, furnishing hot and cold baths of a superior description. There are two par. churches,—one an old, heavy-looking building, with a low, square tower; the other, at the opposite side of the town, a very handsome modern Gothic structure, with a light octagonal tower, built at an expense of 26,000*l*. The R. Catholics, Independents, Baptists, and Society of Friends have also their respective places of worship, to which are attached well-attended Sunday schools. A national school furnishes instruction to about 250 boys and 180 girls, and there are two other large day schools. Drapers' almshouses, founded in 1709, a dispensary, and lying-in charity, are the principal charitable institutions; and in the immediate vicinity, close to the beach, is a large sea-bathing infirmary, founded in 1792, and since so much enlarged as to furnish accommodation for about 120 patients. The harbour dries at low water. To obviate this defect a stone pier, projecting 900 ft. into the sea, was erected from the designs of the late John Rennie; still, however, this was insufficient for the purpose, there not being more than from 4 to 5 ft. water at the pier head at low ebb. Since 1824, however, a wooden jetty, connected with the pier, has been constructed, which projects into deep water, and may be approached by steamers or other vessels at any time of the tide, except when it blows a gale from the N. or NNE. The pier is a favourite promenade for the town's folk and visitors.

Margate enjoys a considerable coasting trade, and has some commerce with Holland and Germany; but neither these nor its fishery are of any importance compared with the advantages that accrue to it from the thousands of visitors who annually resort thither from the metropolis. The town indeed, like many others, owes its present importance to the invention of steam; for though prior to 1817 it was a respectable and well-frequented watering-place, the means of access to London were so difficult and tedious, that none but those who could afford a week or two of uninterrupted leisure were ever induced to visit it. But within the last twenty years the communication with London has been so greatly facilitated, that Margate may now be considered as within 2 or 3 hours of the metropolis. Several handsome steamers ply regularly between London Bridge and Margate; and, for some years past, the number of persons landed from these steamers at Margate is supposed to have averaged above 90,000 a year. The fares by steamers, as well as the two lines of railway, being extremely low, Margate is frequented chiefly by the families of tradesmen and others belonging to the middle classes, for whose amusement there are, besides the music-halls and theatre already mentioned, numerous bazaars and libraries, with the Tivoli Gardens, in the suburbs. Great numbers of persons engaged in business during the week join their families here late on the Saturday, returning to London early on the Monday morning. Both the London, Chatham and Dover and the South Eastern railway companies have stations at Margate.

Margate, as a port, is subordinate to Ramsgate. It is the chief place of a poor-law union, comprising all the pars. in the Isle of Thanet.

MARIA-THERESIANOPEL, or THERE-

Digitized by Google

SIENSTADT (Hungar. *Szabatka*), a royal free town of Hungary, co. Bacs, in the great plain between the Danube and Theiss, 25 m. SW. Segedin, and 100 m. SSE. Pesth. Pop. 35,760 in 1858. The town is well built, and has numerous handsome public edifices; including several churches, a gymnasium, large barracks, and a town-hall. It has manufactures of linen cloth, leather, and tobacco, and a large trade in horses, cattle, sheep, raw hides, and wool.

MARIANNA, an episcopal city of Brazil, prov. Minas Geraes, of which it is the cap., on the Carmo, a tributary of the Doce, 8 m. ENE. Villa Rica. Its pop. is estimated at from 6,000 to 7,000. It stands principally in a small plain, bounded by rocky hills, the small knolls and projections of which are crowned by its churches. The city itself is nearly square, and consists principally of two well-paved streets, regularly laid out, and conducting to a kind of square. The houses are whitened, and have a neat appearance. The supply of water is ample, and is of material importance in the cultivation of several extensive gardens; but, being surrounded by lofty eminences, the air is close and hot, and the town unhealthy. There are several churches and a large cathedral. The Carmelite and Franciscan convents, the ecclesiastical college, which has sundry privileges, the bishop's palace, surrounded with fine gardens, and the town-hall, are among the other chief public buildings. It has very little trade, and depends chiefly on the mines and farms in its vicinity.

MARIAZELL, or MARIANZELL, a village of the Austrian empire, prov. Styria, in a mountainous district, about 55 m. SW. Vienna. Pop. 980 in 1857. The village is celebrated for possessing a shrine of the Virgin, which renders it the 'Loretto' of the Austrian empire, and a principal place of Christian pilgrimage. The place, which stands at an elevation of about 2,200 ft. above the sea, is small and mean-looking; and consists principally of inns and alehouses, for the accommodation of the visitors, the influx of which only ceases when the roads are impassable by snow. The only building of note is the church, rebuilt, since 1827, on the site of one erected in 1363 by Louis I., king of Hungary, over the chapel in which the image of the Virgin is placed. The church, as it now stands, is of Roman architecture, except the porch, which is Gothic. It is a spacious edifice, 286 English ft. by 99 inside, and is surmounted by a spire 275 ft. in height. Some of the side altars and chapels are handsomely decorated; but its principal object of curiosity and devotion is the small stone chapel, erected by a margrave of Moravia, in 1202, instead of the wooden hut in which the *Gnaden Statue*, 'Statue of Grace,' had stood from about 1150, when it was brought thither by a Benedictine monk. This image, like that of Loretto, is ascribed to St. Luke; and, like it, also, is but an indifferent specimen of the apostle's skill in statuary. It is a rudely carved wooden figure, 18 in. in height, representing the Virgin with the Saviour on her knee. Both are as splendid as brocade, gold, gems, and bad taste can make them; their faces are of a negro hue, the effect perhaps, in part, of the smoke of the solitary lamp kept constantly burning in the gloomy recess in which they are cooped up. The altar and other decorations of the shrine are said to be of solid silver, and the chapel is surrounded by a costly fence of the same metal. A thousand acres of land were assigned for the support of the church, and its treasury was very rich previously to the reign of Joseph II., having received many valuable donations from preceding sovereigns, princes, and private individuals. But Joseph, unawed by the sanctity of the place, did not hesitate to strip the shrine of the greater portion of its wealth; and profanely threw the silver angels that guarded the high altar, and even the figures of his father and mother, into the melting pot. The late emperor and empress, however, made a propitiatory visit to the cell, and endeavoured, by their pious liberality, to atone, in some measure, for the sacrilegious depredations of their predecessor.

The ecclesiastical establishment of Mariazell consists of about twenty resident priests, deputed from the abbey of St. Lambricht, who here form a kind of subsidiary Benedictine college, under a pro-rector. During half the year all find abundant employment among the penitents, who arrive here from all parts of the empire. Shortly after the erection of the church, the popes granted the same indulgences to the shrine of Mariazell as were attached to St. Peter's at Rome, and thenceforward it became crowded with pilgrims. Previously to the reign of Joseph, the pilgrims are stated to have amounted to about 100,000 annually; and it is alleged that, at the celebration of the sixteenth jubilee of the miraculous image, in 1757, no fewer than 380,000 individuals did homage to the sable Maria. Perhaps there must not be attached too much credit to this statement; but it is, at all events, certain, that the number was very great. The shrine is, at present, annually visited by about 60,000 pilgrims. It is customary for the pilgrims from different places to set out together; and formerly it was no unusual circumstance for a band of pilgrims from one province or city to have a contest for precedence with those from another; so that disturbances, which frequently ended in bloodshed, were perpetually occurring. The government has, however, put an end to these unseemly brawls, by ordering that the pilgrimages from different places should take place at different times. Accordingly, most of the towns of any importance in Upper and Lower Austria, Styria, Bohemia, and Moravia, and some in the W. parts of Hungary, have their stated days on which the devotees assemble, and form their processions of piety and pleasure after the manner described by Chaucer in his Canterbury Tales. In all, about eighty processions take place annually from different parts of the empire. Vienna furnishes four distinct parties, three in June or July, and one in August; the last, which is also the largest, generally consists of about 3,000 persons of both sexes and all ages, travelling chiefly on foot, and performing the journey in four days. In their progress they are jumbled together, without any regularity, until they come within about a mile of the shrine. Here they halt; and some hours are generally occupied in marshalling the confused assemblage into regular devotional order. Banners are unfurled; sacred emblems exposed to view; the maidens and youths are placed in the van of the procession, after whom follow the elder pilgrims, male and female, in distinct parties; and thus they advance to the church, by slow and measured steps, stopping at certain appointed stations on the way, and chanting in their native tongue, whatever it may be, some one of the litanies in general chorus. Arriving by thousands in a day, they fill to suffocation every inn and house of accommodation within the town; but the larger portion are, notwithstanding, obliged to bivouac in the fields around. It is needless to add, that by far the largest proportion of those who join these processions are but little influenced by religious motives.

The holy image has been but an indifferent protectress of the village of Marianzell. Six times has it been destroyed by fire, and its pop. tem-

Digitized by Google

porarily reduced to ruin. The last conflagration occurred in 1827; when the roof and towers of the church were destroyed, and, out of 111 houses, only 20 escaped. The inhabs. are generally poor. They depend principally on the supply of necessaries, and of rosaries, tapers, relics, and such like articles, to the pilgrims.

The iron-foundries, 2 or 3 miles distant from Marianzell, are the most important of the Austrian empire. Every species of casting is executed in them, from the largest cannon and steam-engines, down to trinkets, which are said to rival those of Berlin. Marianzell has also some copper and sulphur works: a great deal of timber is sent from its neighbourhood to Vienna and the Black Sea.

MARIE-GALANTE, one of the French W. India islands. See GUADELOUPE.

MARIENBURG, a town of the Prussian dom., prov. W. Prussia, cap. circ. Marienburg, on the Nogat, an arm of the Vistula, here crossed by a bridge of boats, 27 m. SE. Dantzic on the railway from Dantzic to Königsberg. Pop. 7,560 in 1861. The town is chiefly interesting as having been the seat of the grand masters of the Teutonic Order for nearly two centuries. To the NE. of the town and on the summit of a small hill, 50 ft. above the level of the Nogat, and an equal number of feet from the bank of the river, stand the ruins of the Teutonic Castle, so often mentioned in the history of chivalrous times. The whole mass is at once imposing and picturesque, bespeaking the grandeur of its former occupants, and the purposes to which it was destined. Most probably this castle had been commenced towards the end of the twelfth, or the beginning of the thirteenth, century. In 1281 it was greatly enlarged, by the addition of that part which was afterwards known as the Old Castle; and, about the same time, the residence of the grandmaster was transferred to Marienburg from Venice. Succeeding grand masters built the middle and lower castle (erected, according to Zedlitz, chiefly between 1306 and 1309), and the church of Nôtre Dame in the immediate vicinity, which is still in existence, and forms a very prominent feature in the landscape of these ruins. In 1644, the Old Castle was burnt to the ground; but the rest of the building escaped, and, after undergoing many vicissitudes, was put in complete repair by the present king of Prussia, when crown prince. It comprises a chapel, in which are numerous monuments of the grand masters, cells of the knight-monks, with their halls, dormitories, refectory, subterranean caverns, and chapter-house, in tolerable preservation. The chapter-house, by far the most interesting part of the edifice, is a large square apartment, with 20 windows, displaying the arms of the successive grand masters in stained glass. An antiquated tower, called the *Buttermilchthurm*, and some singular watermills in the neighbourhood, are among the other curiosities of the town. It has a Rom. Catholic and a Calvinist church, a teachers' seminary, a deaf and dumb school, and numerous other schools; a workhouse and hospital. It is the seat of the council for the circ., and has manufactories of woollen and cotton cloths, stockings, and hats; various breweries, distilleries, and tanneries, and some trade in corn and timber. Marienburg fell into the hands of the Poles by their conquest of the Teutonic knights, in 1457, and was ceded to Prussia at the treaty of Thorn, in 1466.

MARIENWERDER (Slav. *Kwidzin*), a town of the Prussian dom. prov. W. Prussia, cap. of the gov. and circ. of Marienwerder, on the Little Nogat, a tributary of the Vistula, 44 m. SSE. Dantzic, and 51½ m. NNE. Thorn. Pop. 9,646 in 1861. The town stands on elevated ground, is well-built, and has four suburbs. Its cathedral, erected in the 13th century, has a steeple 170 ft. in height; and in its interior are the tombs of many church dignitaries and grand masters of the Teutonic order, and some curious mosaics. What remains of the old castle is now appropriated to the judicial courts for the circle and town, and a school of arts. Marienwerder is the seat of the head court of justice for the province of Prussia, and of the provincial council and agricultural union for W. Prussia. It has a gymnasium, a royal school of agriculture, a school for the improvement of neglected children, a hospital for blind soldiers, to which is attached the *Louisicen*, an institution for the blind widows of soldiers, and a large printing establishment. It has, however, few manufactures and little trade, except in retail, the inhabs. being principally employed in the supply of necessaries to the various public establishments.

MARIGLIANO, a town of South Italy, prov. Caserta, cap. cant., 12 m. NE. Naples. Pop. 10,606 in 1862. It has some ruins, which have been supposed to have formed part of an ancient palace of the Marii.

MARINO (SAN), a town of Central Italy, prov. Urbino, at the foot of a craggy mountain, 2,200 ft. high, 15 m. SW. Rimini, and 26 m. NNW. Urbino. Pop. 5,500 in 1862. The town is not very accessible, and is irregularly built. It has a principal square, in which is the town-hall; 5 churches, in one of which are the tomb and statue of St. Marino, the founder of the town; 4 convents, and 3 castles. The inhabs. are chiefly occupied in agriculture and cattle breeding, or in the manufacture of silk. Most of the wealthy inhab. reside in the village of Borgo, at the foot of the hill on which the town is situated.

San Marino was an independent republic, and as such the smallest state in Europe, till the year 1852. The territory of the republic comprised 22 sq. m., with a pop. of about 7,600. Both the town and republic grew up around a hermitage formed here by an individual of the name of Marinus, or Marino, belonging to Dalmatia, afterwards enrolled in the calendar of saints, in the 5th century; and the insignificance and uninviting character of its territory appear, by making it unworthy of attention, to have enabled it to preserve its independence during the disturbed periods of the dark and middle ages. It was occupied by Cæsar Borgia, but for a short period only; and was taken, in 1739, by Cardinal Alberoni; but the Pope disavowed the proceeding, and restored San Marino to its privileges. In consequence of the revolutionary movements in the Roman states, finally suppressed by French troops, the republic was annexed to the Papal dominions in 1852.

MARKET-BOSWORTH. See BOSWORTH (MARKET).

MARKET-DRAYTON, a market town and par. of England, partly in N. Bradford hund. co. Salop, and partly in N. Pirehill hund. co. Stafford, on the Tern, a tributary of the Severn, 18 m. NE. Shrewsbury, and 135 m. NW. London. Area of par. 13,080 acres. Pop. of par. 5,242, and of town 3,661 in 1861. The town, which stands on the W. side of the river, and in the co. Salop, is clean and well-built, with tolerably wide streets. The church, originally erected in the reign of Stephen, was all but rebuilt in 1787. There are also places of worship for R. Catholics, Wesleyan Methodists, and Independents, with attached Sunday schools. The charitable institutions comprise a free school, founded in the reign of Queen Mary, a national

Digitized by Google

school, and a set of almshouses and dispensary, with a few small money bequests. Drayton was formerly a place of more consequence than at present, its market having been among the largest in England, till the formation of the Liverpool and Birmingham Junction Canal gave superior advantages to Stone, in Staffordshire. There are several paper-mills and horse-hair manufactories close to the town; but most of the inhabitants are engaged either in retail trade or farming pursuits.

Drayton is a bor. by prescription, governed by a mayor and two constables, chosen at a court-leet by the lord of the manor; and petty sessions are held here for the Drayton div. of Salop. Markets on Wednesdays, chiefly for corn: fairs, for horses and farming-stock, Wednesday before Palm Sunday, Sept. 19, and Oct. 24.

About 1 m. from Drayton, on Blore Heath, a battle was fought between the partisans of the houses of York and Lancaster, on the 23rd of Sept. 1459. Lord Audley, the Lancastrian general, was slain in the engagement; the spot where he fell being marked by a stone, close to the Newcastle road.

MARKET-HARBOROUGH. See HARBOROUGH (MARKET).

MARKET-JEW. See MARAZION.

MARKET-RASIN, a small market town and par. of England, Lindsey div., co. Lincoln, wap. Walsheroft, on the river of its own name, a trib. of the Ancholme, 13½ m. NE. Lincoln, and 130 m. N. London. Area of par. 1,220 acres. Pop. of par. 2,563 and of town 2,468 in 1861. The town deserves notice, chiefly on account of its large cattle and sheep fairs, which are attended by persons from almost all parts of the co. The church, an ancient structure, with an embattled tower, has peculiar windows, resembling those of the church at Louth. The Rom. Cath. and Wesleyan Methodists have also their respective places of worship; and its only charities are a free school, incorporated with the national school, and a set of almshouses. Markets on Tuesdays; and fairs on alternate Tuesdays, between Palm Sunday and Sept. 25. About 1½ m. W. Market-Rasin is the village of Middle-Rasin, remarkable for a small church presenting a most beautiful specimen of early Norman architecture.

MARLBOROUGH, a parl. and mun. bor. and market town of England, co. Wilts, hund. Selkley, on the Kennet, 27 m. E. Bath, 70 m. W. London, and 74 by Great Western railway. Pop. of mun. bor., 3,684, and of parl. bor. 4,893 in 1861. Area of parl. bor. (which includes, with the old bor., the par. of Preshute), 4,380 acres. The town consists of one broad main street, crossed by others of inferior dimensions. The houses are irregularly built, and apparently of great antiquity, having high and curiously carved gables; a portion of the High Street also has a kind of colonnade projecting from the houses. The guildhall is supported on pillars, the lower part being open for the accommodation of the people frequenting the market; above are the council-chamber, sessions-hall, and assembly-rooms. There is also a handsome market-house, the upper part of which is used as a national school. The prison, which serves as a bridewell and house of correction, was built in 1787; but it is too small to admit either of separate confinement or proper classification. There is also a very large hotel, partly built with the materials of the old castle, which once stood at the S. end of High Street. The old church of St. Mary the Virgin, near the guildhall, is of Early Norman architecture, with a low square tower; the living is a vicarage, in the gift of the dean of Salisbury. The other church, which stands at the W. end of High Street, is of more modern construction, and distinguished by its light pinnacled tower; the living is a rectory, in the patronage of the bishop of Salisbury. The Independents, Wesleyan, and Calvinistic Methodists have likewise their respective places of worship, with attached Sunday schools. The national school furnishes gratuitous instruction to 100 boys and the same number of girls; besides which, there are two church Sunday schools. It has also a free grammar school, founded by Edward VI., and endowed with estates producing about 70*l.* a year; the instruction is almost exclusively classical, and the school has the privilege of sending an exhibitioner, on the Somerset foundation, to Brasenose College, Oxford.

Marlborough, which has little trade, derived its chief importance from being on the great road between London and Bath; but it has lost this advantage, as the Great Western railway runs through a line of country considerably N. of the town. Malting and rope-making are extensively pursued. Large quantities of corn and cheese are sent to London and Bristol, their carriage being greatly facilitated by the Kennet and Avon Canal, which commences at Newbury, and joins the Avon near Bath, having an entire length of 57 m.

The bor., which received its first charter from King John, in 1205, and a subsequent one, in 1577, from Elizabeth, is governed under the Mun. Reform Act, by a mayor, 3 other aldermen, and 12 councillors; but it has no separate commission of the peace. Marlborough has sent 2 mems. to the H. of C. since 24 Edw. I., the right of election, down to the Reform Act, being vested in the mayor and burgesses; but it was, in fact, a mere nomination bor., belonging to the marquis of Aylesbury, the proprietor of a large estate in the vicinity. Regis. electors, 256 in 1865. Markets on Saturday; large fairs, 10 July, 1 Aug., and 23 Nov.

MARLOW (GREAT), a parl. bor., market town, and par. of England, co. Bucks, hund. Desborough, on the N. bank of the Thames, 29 m. W. London by road, and 30 by Great Western railway. Pop. of bor. 6,496 in 1861. Area of parl. bor., which includes the several pars. of Great Marlow, Little Marlow, Medmenham, and Bisham (the last being in Berks), 14,910 acres. The town, formed by several streets, meeting in a large open market-place, is irregularly built; but is well paved and lighted, and contains many substantial houses and a good town-hall. The par. church, opened in 1835, is a handsome structure, surmounted by a spire. The living is a vicarage, in the gift of the dean and chapter of Gloucester. There are, also, places of worship for Wesleyan Methodists and Baptists, with attached Sunday schools. A charity school, for 24 boys and 12 girls, a national school for children of both sexes, and a set of almshouses, are the principal benevolent foundations. Great Marlow has little trade, except what results from its position, in the midst of a rich and productive country, inhabited by wealthy landowners. On the Loddon, however, are several paper-mills, and at the Temple Mills, at Bisham, card board is made. The bor. has returned 2 mems. to the H. of C., with some interruptions, since 28 Edw I.; the right of election being vested, down to the Reform Act in householders, paying scot and lot. The Boundary Act extended the limits of the parl. bor., by including with the old bor. 3 out-pars. Registered electors, 347 in 1865. Market, well attended, on Saturday; fairs, for cattle and farming produce, May 1–3 and Oct. 29.

MARMANDE, a town of France, dép. Lot-et-Garonne, cap. arrond., on the Garonne, here crossed by a bridge of one arch, 30 m. NW. Agen. Pop. 8,661 in 1861. The town is regularly laid out,

Digitized by Google

well built, and clean, has several good public edifices, and is nearly surrounded by an esplanade, planted with trees. It has a small port, suitable for steam-boats, which ascend the Garonne as high as Marmande. It is the seat of courts of original jurisdiction and commerce, and has manufactures of woollen and linen fabrics, cordage, and sail-cloth, and several brandy distilleries.

MARNE, a dép. of France, reg. NE., formerly included in the prov. of Champagne, chiefly between lat. 48° 30′ and 49° 20′ N., and long. 3° 30′ and 5° E., having N. Ardennes and Aisne, W. the latter dép. and Seine-at-Marne, S. Aube, and E. Haute-Marne and Meuse. Length, E. to W., about 70 m.; greatest breadth, nearly as much. Area, 818,044 hectares; pop. 385,498 in 1861. The hills in this dép. do not rise to more than 1,300 ft. above the sea; its general slope is from SE. to NW., in which direction nearly all its rivers flow. It derives its name from the Marne, which divides it into two nearly equal parts. This river rises in the dép. of Haute-Marne, about 3 m. S. Langres; it flows, at first NW., and afterwards generally W., through the déps. Haute-Marne, Marne, Aisne, Seine-et-Marne, Seine-et-Oise, and Seine; and falls into the Seine at Charenton, about 1 m. SE. Paris, after a course of about 300 m., for 215 of which it is navigable. It has some considerable affluents; and Vitry, Châlons, Château-Thierry, and Meaux are on its banks. About 2-3ds of this dep., including all its central portion, has an arid barren soil, composed principally of chalk, covered with a thin layer of vegetable mould. But on the borders of this sterile tract are the vineyards which produce the celebrated champagne wine; and surrounding it is a country with a deep and rich alluvial soil. The cultivated land is estimated at 614,825 hectares, pastures at 38,454 ditto, vineyards, 18,495 ditto, woods 78,901 ditto, and heaths, wastes, &c., 16,961 ditto. Considerably more corn is grown than is required for home consumption. Its average annual amount has been estimated at 4,000,000 hectol.; but, according to the official tables, nearly 5,000,000 hectolitres were harvested in recent years, chiefly wheat, oats, and rye. The culture of the vine is, however, by far the most important branch of industry. The dep. is supposed to furnish annually from 650,000 to 700,000 hectol. Of this quantity, however, the finest growths, produced in the arronds. of Epernay and Rheims, make but a small portion. The white wines, which include the finest varieties of *champagne*, are by far the most celebrated. They are of three sorts, *still*, *mousseux*, and *grand mousseux*. The *vrais gourmets* prefer the first, or still wines, of which Sillery (which see) is the best; but the greater number of amateurs prefer the mousseux, being that variety of the sparkling wine which merely creams on the surface: the *grand mousseux*, or full frothing wines, are less esteemed. The wine of Ay, the best of the mousseux variety, is an exquisite liqueur, worthy, according to the President De Thou, of being called *Vinum Dei!* The best of the red wines are those of Verzy, Verzenay, Maily, Bouzy, St. Basle, and Clos-Thierry. The vineyards round Epernay are valued at from 4,000 to 10,000, and even 20,000 fr. the arpent; and about 5,400 *pieces* of wines of the finest growths are produced annually in its arrond., and that of Rheims, about a half of which is exported to foreign countries. Rheims, Epernay, and Avize are the chief seats of the wine trade. Epernay has extensive vaults, excavated in tufa, and admirably fitted for the preservation of wines. (See EPERNAY.)

Agriculture is in a tolerably advanced state. Near St. Menehould orchards are numerous. More cattle are reared than in any of the adjacent deps., the number being about 120,000 with 506,000 sheep, the breeds of which have been much improved by crossing with Merinos and English varieties. In 1861, of 179,318 properties subject to the *contribution foncière*, 98,523 were assessed at less than 5 fr., and 24,897 at from 5 to 10 fr.; 134 were assessed at 1,000 fr. and upwards. Marne has but one iron mine, but it furnishes excellent millstones and potter's clay. Manufactures of various kinds of woollen fabrics and woollen yarn are established at Rheims; and hats, silk goods, paper, glass, earthenware, cordage, leather, candles, and soap are made in different places. Marne is divided into five arronds.: chief towns, Châlons-sur-Marne the cap., Epernay, Rheims, St. Menehould, and Vitry-le-Français.

MARNE (HAUTE), a dép. of France, reg. N.E., between lat. 47° 35′ and 48° 40′, and long. 4° 40′ and 6° E., having N. the déps. of Marne and Meuse, E. Vosges and Haute-Saône, S. the latter and Cote d'Or, and W. Cote d'Or and Aube. Length, NNW. to SSE., 80 m.; average breadth, about 30 m. Area, 621,968 hectares; pop. 254,413 in 1861. The *plateau* of Langres and the Faucilles mountains traverse the S. and E. parts of this dép., covering the greater part of its surface with their ramifications. They, however, no where rise to any great elevation; Mont-aigu, the highest point in Haute-Marne, being only 1,630 ft. above the sea. The chief rivers are the Marne, which intersects the dép. lengthwise; its affluents the Ornain, Blaise, Meuse, and Aube, rise in this dép., and have, more or less, a N. course. Surface mostly stony or calcareous, there not being more than 11,000 hectares of rich soil. The arable land is supposed to comprise 335,611 hectares; pasture land, 35,528 do.; vineyards, 13,136 do.; woods, 174,275 do.; and heaths, wastes, &c., 27,969 do. The farmers devote their attention to the growing of corn, the culture of the vine, and the rearing of live stock. The produce of corn exceeds the demand for home consumption: the annual supply is estimated at nearly 1,800,000 hectolitres, chiefly wheat and oats. The produce of wine amounts to between 400,000 and 500,000 hectols. a year; but the quality is very inferior to that of the wines of Marne. Cherries and walnuts are grown in considerable quantities. The pasture lands are excellent, and there are about 84,000 head of cattle, and 221,000 sheep in the dép.: the annual produce of wool is estimated at 160,000 kilogr. In some cantons of the arrond. Vassy, a good many turkeys are reared. Bees are numerous, and wax and honey are valuable products. This is one of the best wooded déps. in France, and St. Dizier has a considerable trade in timber, sent in large quantities to Paris by the Marne. Iron is the only metal found in the dép., but the working of the iron mines, and the manufacture of their produce, hold a high rank among the occupations of the people. The dép. has upwards of 50 smelting furnaces (*hauts-fourneaux*), and 100 ordinary forges. Iron plates, rasps, files, and hardware of all kinds are manufactured; and the cutlery of Langres has long enjoyed a high reputation. Chaumont has manufactures of gloves and haberdashery. Linen and cotton thread, wax, candles, leather, brandy, and vinegar are the other chief articles made in the dép. Property is greatly subdivided, and mostly held by the agricultural workers themselves, more than half of the *parcelles* being assessed at less than 5 francs. Haute-Marne is divided into three arronds.; chief towns, Chaumont the cap., Langres, and Vassy.

MAROS-VASARHELY, or SZEKELY-VARSAHELY (Germ. *Neumarkt*, Wallach. *Oschorej*),

Digitized by Google

a royal free town of Transylvania, the cap. of the Szekler-land, and of the *stuhle*, or presidency, of Maros; on the Maros, 53 m. NNE. Hermanstadt. Pop. 11,217 in 1858. Although there is nothing very imposing in the wide streets and small houses, of which Maros-Vásárhely is mostly composed, it is rather an important place; and in winter many of the gentry in the neighbourhood take up their residence within it. Moreover, both Protestants and Catholics have colleges here; the Protestant has 800, and the Catholic 300 scholars; and these institutions give something of a literary air to its society. Maros-Vásárhely is also the seat of the highest legal tribunal in Transylvania, the Royal Table; and it is, in consequence, the great law-school of the country. Almost all the young nobles who desire to take any part in public business, as well as all the lawyers, after having finished their regular course of study, think it necessary, under the name of *Juraten*, to pass a year or two here in reading law, and attending the court.

The town has a fine library founded by the Chancellor Teleki, and left to his family, on the condition of its being always open to the public. It contains about 80,000 vols., which are placed in a very handsome building, and kept in excellent order. It is rich in choice editions of the Latin and Greek classics. The town has also a Rom. Cath. gymnasium and seminary, a reformed college, with a library and printing-office, two convents, a flourishing *casino*, or literary club, and considerable trade in agricultural produce, particularly tobacco, which is grown in large quantities in its vicinity.

MARSALA (an. *Lilybæum*), a city and sea-port of Italy, island of Sicily, at its W. extremity, adjacent to Cape Boeo (the *Promontorium Lilybæum*), in the intend. of Trapani, 16 m. SSW. Trapani. Pop. 28,939 in 1862. The city is of a square form, and is surrounded by an old wall, flanked at the angles with bastions, but destitute of a glacis. It might be easily rendered a strong military post; but at present it is without ordnance, quarters, or bomb-proof stores. The town, which is well built, is bisected by a broad and regular street, called the Cassaro, on one side of which is the cathedral, a large edifice, ornamented with 16 fine marble columns of the Corinthian order. It has 16 churches, numerous convents, a *retiro*, or place of retirement under monastic regulation, 3 abbeys, a gymnasium, a seminary, a hospital, with 70 beds, a *monte-di-pieta*, barracks for cavalry, and an old castle. Among its curiosities is a bell-tower, which vibrates perceptibly when the bell is rung.

Lilybæum was famous for its port; but, though secure, and well adapted for the use of the galleys of the ancients, it would not have accommodated the larger ships of modern times. It seems that, where deepest, the ancient port could not have had more than 14 ft. water. The Romans, in their struggles with the Carthaginians, attempted over and over again to fill up the port, but uniformly without success. This, however, was effected, in 1570, by Don John of Austria, who, to prevent the Barbary corsairs from taking refuge here, filled up the port with rubbish. The modern is not, therefore, identical with the ancient harbour, but is about 1 m. S. from the town. It has a mole, constructed chiefly for the shipment of wine: large ships anchor SW. from the city, about 2 m. off shore, in from 8 to 11 fathoms water. The entrance to the port is a good deal encumbered with rocks and reefs, the knowledge of which is as indispensable to the modern, as it was to the ancient mariners.

Marsala is indebted for its importance in modern times to its wine trade, which has grown up, within the last half century, through the skill and intelligence of the Messrs. Woodhouse, Englishmen, who began business here in 1789. The wine, however, did not begin to come into much repute till 1802, when it was supplied, by order of Lord Nelson, to the Mediterranean fleet. It is a dry wine, the best qualities closely resembling the lighter sorts of Madeira; but the extensive demand for it in this country is, no doubt, ascribable more to its cheapness than its quality. It is, however, in all respects superior to Cape Madeira, with which it principally comes into competition. The success of the Messrs. Woodhouse led others to embark in the business, and there are now several very large establishments at Marsala. The entire produce of the district is estimated at about 30,000 pipes, of which from 18,000 to 20,000 are exported, partly to the U. States and the W. Indies, and partly to England. Besides wine, Marsala exports corn, cattle, oil, salt, and soda; but in no great quantities.

Lilybæum, from its proximity to Carthage, and the excellence of its port, was, for a lengthened period, the capital of the Carthaginian possessions in Sicily. It was a place of great strength, being fortified by strong walls and a deep ditch, into which the sea appears to have flowed (Polybius, lib. i. cap. 42); indeed, a portion of the ancient ditches still exist in tolerable preservation. (Hoare's Classical Tour, ii. 73.) The size of the city may be inferred from the fact of its requiring a garrison of 10,000 men, exclusive of the citizens, for its defence. The successful resistance it opposed to Pyrrhus, by whom it was attacked with great fury, and its defence against the Romans, sufficiently evince its strength and importance. After having ineffectually attempted to carry it by assault, the Romans converted the siege into a blockade, and the city only surrendered at the end of *five* years, when the defeat of Hanno made farther resistance unavailing. (Ancient Universal History, xvii. 531, 8vo. ed.) Under the Romans it was the residence of a quæstor, and is called by Cicero *civitas splendidissima*. (In Verrem, v. cap. 5.) Very few remains now exist of its ancient grandeur; vases and coins are, however, occasionally dug up; and in the town-hall is a group of two lions destroying a bull, said to be worthy the best period of Grecian art.

MARSEILLES (Fr. *Masseille*, an. *Massilia*), a large commercial city and sea-port of France, dép. Bouches-du-Rhone, of which it is the cap., on the E. side of a bay of the Gulf of Lyons, 30 m. WNW. Toulon, about 170 m. SSE. Lyons, and 420 m. SE. Paris, at the terminus of the Paris-Mediterranean railway. Pop. 260,910 in 1861. The city stands in a most beautiful situation. It occupies the centre of a basin about 6 m. or 7 m. broad, bounded by lofty precipitous hills. The whole space from the city, back to the hills, is adorned with villas and hamlets; for every merchant or respectable shopkeeper here has his *maison de campagne*. The country around is, however, extremely arid; and the wind called the *mistral* is blighting and noxious in the extreme. The city is somewhat of a horse-shoe shape, and built round its port. It is divided into two parts. The first, or old town, occupying the site of the ancient Greek city, on rising ground, on the N. side the harbour, is confined, ill-built, with narrow dark streets, or rather lanes, not half ventilated, and inconceivably filthy. The second, or new town, constructed in the modern style, with regular streets and handsome squares and houses, stands on the S. and E. sides of the port; being separated from the old town by a magnificent

Digitized by Google

street, which extends in a right line from the Porte d'Aix to the Porte de Rome, traversing the city in its entire length N. to S. The middle part of this street, called the *Cours*, is sheltered by trees; the houses on either side are good; it has some handsome fountains, and is one of the chief places of public resort: but the favourite public promenade is the *Rue Cannebière*; a fine broad street, running at a right angle from the foregoing to the inner extremity of the harbour, and completing the line of demarcation between the old and new town. Marseilles has been fortified at different periods; but its walls were finally destroyed in 1800, and their place is occupied by boulevards planted with trees, beyond which the city is rapidly extending, particularly towards the E. and S. It still is defended by the fort of *Notre Dame de la Garde*, on a steep eminence to the S.; but it is more remarkable for the beauty of its situation than for its strength: the harbour is protected by a fort on either side its entrance, by the Château d'If, on the island of the same name, and by some additional works on the islands of Ratoneau, Pomegue, &c., nearly opposite its mouth.

Marseilles has numerous public edifices, but none merits any detailed notice. The cathedral occupies the site of an ancient temple of Diana; it is extensive, but heavy-looking. Its interior is a mixture of various orders; and its ornaments, which are mostly of the 11th and 12th centuries, are in bad taste. None of the churches within the city have any considerable claims to notice. The church of St. Madeleine (formerly *des Chartreux*), in the suburbs, an edifice constructed in the 17th century, is far superior to any one else; it has a handsome façade, and 2 steeples (*campaniles*), remarkable for their light appearance. There are 25 Rom. Cath. churches, several chapels, 2 Greek churches, a Protestant church, and a synagogue. The prefecture is the finest of the public buildings. The town-hall, on the N. quay, is a heavy edifice, composed of two separate piles of building, connected by a light and elegant arch on the first story. Its ground floor is appropriated to the exchange. There are numerous hospitals, and other charitable institutions. The Hôtel Dieu, one of the first established hospitals in France, was founded in 1188; it has usually from 500 to 600, and is capable of accommodating 750 patients. The *Hôpital de la Charité*, founded in 1640, an asylum for aged persons, and for orphans and foundlings, has usually from 800 to 850 inmates. The Lazaretto, one of the largest and most perfect establishments of the kind in Europe, is situated to the N. of the city, and is surrounded by a triple wall. Ships may clear from it while in quarantine. Marseilles has also a lying-in hospital, a *bureau de bienfaisance*, asylums for poor children, a *mont-de-piété*, and a savings' bank. One of the largest public edifices, formerly a Bernardine convent, accommodates the Royal College, which has between 300 and 400 students; the Royal Society of Science, Literature, and Art; the public library of 50,000 printed vols., and 1,300 MSS., with cabinets of natural history, medals, and antiquities, and a gallery of paintings, comprising works by Carracci, Salvator Rosa, Rubens, Vandyk, Jordaëns, and other artists of the Italian and Flemish schools. The observatory, on the highest point of the old town, has apartments appropriated to schools of navigation, and geometry. The Grand Theatre, built after the plan of the Odéon in Paris, is spacious and handsome. It has 6 tiers of boxes, but is in general ill-attended. The *Théâtre Français*, a small building, open on Sundays for vaudevilles, and on other days for occasional concerts, is more frequented. The other chief public buildings and establishments are the hall of justice, the new prison, the custom-house, arsenal, barracks, mint, bishop's palace, various public halls, and the fish-market. Marseilles has a botanic garden, and some excellent public baths. It is well supplied with water from fountains and public wells, but it is not introduced into the houses. At the extremity of the Rue d'Aix is an unfinished triumphal arch, of the Corinthian order, originally erected in honour of the Duc d'Angoulême, after his invasion of Spain in 1823; but afterwards made to commemorate the Revolution of 1830, one of the effects of which was to expel the Duc d'Angoulême from the kingdom. Marseilles has but few remains of antiquity. Except a fountain, with an inscription in Greek, an obelisk, and the remains of an aqueduct, none is worthy of mention. It is doubtful, indeed, whether Marseilles possessed any grand or remarkable edifices in antiquity; and if it did, the corroding influence of the sea air, which proves so detrimental to the modern buildings, has been a powerful agent in their destruction. But the Marseillais, for a lengthened period, took little interest in the preservation of the relics of past ages.

Marseilles is the see of a bishop, suffragan under Aix; the seat of tribunals of primary jurisdiction and commerce; a chamber of commerce; the residence of a commissary-general and a treasurer of marine; and the head-quarters of the 8th military division of the kingdom. Consuls from all the principal states of Europe and America are resident in it. Besides the public institutions before noticed, it has a diocesan seminary, a royal society of medicine, societies of agriculture and *belles lettres*, a statistical society, an athenæum, and several commercial and other clubs.

Marseilles has two ports and three docks. The first port, known as the *Vieux Port*, is a fine basin, stretching from W. to E. about 1,000 yards, into the very centre of the city. It has an area of 28 hectares, and from 16 to 18 ft. water at its entrance, and from 12 to 24 ft. within; so that it is extremely well fitted for moderate-sized merchantmen, of which it will accommodate from 1,000 to 1,200. The ships come close to the quays, by which it is surrounded on all sides, except at its entrance; which is defended on its N. side by the tower of St. John, a work of the 15th century, and on its S. side by fort St. Nicholas, constructed by Louis XIV. The second port, constructed in 1853, is called the Port de la Foliette. It has a water area of 20 hectares. Among the docks, the most notable are the *Bassin du Lazaret*, with an area of 16 hectares, and the *Bassin d'Arenc*, and *Bassin Napoleon*, together with an area of 48 hectares. The careening basin, on the right side of the harbour, occupies the site of the ancient necropolis.

There is excellent anchorage ground for men of war and other large ships, about 2 m. WSW., between the isles of Ratoneau and Pomegues, which have been connected by a mound. Ships from the Levant perform quarantine at Pomegues; and on Ratoneau Island is a hospital for those whose health is dubious. A lighthouse, with a revolving light, 131 ft. in height, is erected on the Isle de Planier, about 10 m. from the city, and there is another in Fort St. Jean. Ships having got within ¼ or ½ m. of the Isle d'If, usually heave to for a pilot. The charge for pilotage is 4 sous per ton in, and 2 sous per do. out, for French vessels and vessels belonging to powers having reciprocity treaties with France. With the exception of the above pilotage charges, and the charges on vessels performing quarantine, there are no port

Digitized by Google

charges on ships entering or clearing out from Marseilles.

The trade of Marseilles is very extensive, and is rapidly increasing. The city is the grand emporium of the S. of France, and the centre of 9-10ths of her commerce with the countries bordering on the Mediterranean. The exports consist principally of silk stuffs, wines, brandies, and liqueurs; woollens and linens; madder, oil, soap, refined sugar, perfumery, stationery, verdigris, gloves, and all sorts of colonial products. Among the principal imports are sugar, coffee, and other colonial products; dye stuffs; corn, from the Black Sea and the N. coast of Africa; cotton, from Egypt and America; coal, linen thread, and various descriptions of manufactured goods, from England; hides, wool, tallow, and timber. Marseilles engrosses almost the whole trade between France and Algiers. The city is now also the principal station for the intercourse, carried on by steamers, with Malta, Alexandria, and Constantinople. Besides the steamers employed by the government, there are a great number of boats belonging to private companies, chief among them the 'Messageries.' The following statement exhibits the number of vessels which entered the port in 1862.

Flags	Number of Vessels	Tonnage	Number of Crews
British	247	84,921	7,112
Austrian	134	43,668	1,657
Belgian	13	4,160	152
Buenos Ayres	1	235	12
Chilian	2	1,011	45
Danish	20	2,289	151
Two Sicilies	485	119,603	7,433
Spanish	497	22,657	2,690
United States	85	37,681	1,077
Greek	313	74,102	3,240
Hanoverian	2	572	21
Mecklenburg	12	3,745	139
Oldenburg	2	310	14
Dutch	38	15,106	645
Portuguese	1	69	6
Prussian	11	4,410	123
Roman	52	8,727	496
Russian	54	22,820	1,083
Sardinian	533	69,248	5,330
Swedish and Norwegian	119	31,748	1,281
Tuscan	135	16,269	943
Turkish	36	10,256	595
Hanseatic Towns	5	2,230	66
Total	2,797	575,837	34,311

The total value of the imports into Marseilles, in the year 1862, amounted to 684,671,872 francs, while the exports were of the value of 740,140,875 francs. The total amount of customs duties received in 1862, was 38,198,113 francs.

Though principally distinguished by its commerce, Marseilles has several important manufacturing establishments. Its soap-works, which are numerous and extensive, employ about 700 workpeople, and consume large quantities of olive oil; but, though soap be exported, by far the greater portion of that produced here is destined for home consumption. The artists of Marseilles prepare and fashion coral into a great variety of articles. Among its other manufactures are woollen stockings and caps *façon de Tunis;* hats, of which from 30,000 to 50,000 fine, and from 10,000 to 15,000 coarse, are annually exported; morocco and other leather, and sail-cloth. Marseilles has likewise refineries for sugar, sulphur, wax, and borax, with breweries, oil-works, glass-works, brick and tile works, and furnishes large quantities of vinegar and *liqueurs*. Another branch of industry is the salting and curing of meat, and the pickling and preparing of capers, olives, and other fruits, and of anchovies and other fish. It has, also, a great variety of trades connected with the building and fitting out of ships and steamers.

There are but few great capitalists in Marseilles, for here, as well as in Paris, it is the custom to retire altogether from business as soon as a trader has realised a competency. The people generally seem stout and well-fed. The sailors, porters, and carters are more tanned than at Paris; but the shopkeepers are not sensibly darker than in the capital. The houses and mode of living resemble those of Paris; but in the new streets, houses with front-doors, like the English tenements, are common; while in Paris they adhere to the old plan of vast mansions, with a grand gate and open court in the centre.

Marseilles is very ancient, having, according to the best authorities, been founded by a colony from Phocea, a city of Ionia, about 600 years B. C. The Massilians, as the inhab. were then called, speedily distinguished themselves by their skill as seamen, and the extent of their commerce; and were celebrated for the wisdom of their institutions, and their civilisation. They became, at an early period, allies of Rome; but espousing the party of Pompey, their city was besieged, and, after an obstinate resistance, taken by Cæsar. But though Marseilles lost her liberty, she preserved her commerce and high civilisation under the Romans; and was highly distinguished as a school of *Belles Lettres* and philosophy. The city is spoken of by Cicero in the highest terms of eulogy. (Oratio pro L. Flacco, cap. 26.) At a later period, Agricola was sent thither to be educated; and Tacitus calls her *sedes ac magistra studiorum.* (Vit. Agricolæ, cap. 4.) After the fall of the Roman empire, Marseilles underwent many vicissitudes. In the 10th century it was taken and sacked by the Saracens. The city was afterwards governed by dukes and counts, and sometimes by her own magistrates, and more recently by the counts of Provence. It was finally united to the crown of France in 1482. During the middle ages Marseilles rivalled Venice and Genoa in the trade with the Levant. In 1720 it suffered dreadfully from the plague, which is said to have destroyed from 40,000 to 50,000 of the inhab. The city also suffered considerably from the revolutionary phrenzy and the anti-commercial policy of Napoleon; but finally rose superior to all these disasters, and is now more populous and flourishing than ever.

Marseilles has given birth to many very distinguished individuals, among whom may be specified Pytheas, one of the most illustrious navigators and astronomers of antiquity, who flourished in the 4th century B. C., and Petronius Arbiter, *Auctor purissimæ impuritatis.* Among its modern citizens have been Dumarsais, the grammarian, Mascaron, the celebrated preacher, Peyssonnel, the author of a treatise on the commerce of the Black Sea, and of several other works on the Levant, and Puget, celebrated as a sculptor, painter, and architect.

MARTABAN, a town of the Birman empire, cap. of the prov. Martaban, on the Than-lweng (Saluen) river, near its mouth, 10 m. NW. Maulmain, and 92 m. ESE. Rangoon; lat. 16° 28′ N., long. 97° 30′ E. Pop. uncertain: in 1826, it was estimated at 9,000; but many of the inhab. were then preparing to emigrate into the British territories, and Mr. Crawfurd (Embassy to Siam, ii. 232) estimates the ordinary pop. at only 1,500. It stands on the E. declivity of a high hill, is more than a mile in length, consisting of two long

Digitized by Google

streets, and is surrounded by a stockade, which separates it from some suburbs. The houses are of wood; it has several conspicuous temples, one of which is upwards of 150 ft. in height. Martaban has an imposing appearance from the water, facing which is a battery on a rocky mound, and a deep wall of masonry with embrasures for cannon, &c., behind the stockade. It was formerly a place of considerable trade; but, early in the course of last century, its navigation was injured by the sinking of vessels in the river by the Birmans in their wars with Pegu: and Maulmain (which see) is at present the emporium of all the adjacent provs. Martaban was taken by the British in 1824.

MARTHA, or MARTA (SANTA), a sea-port town of Columbia, New Granada, dep. Magdalena, cap. prov. Santa Martha, on the Caribbean Sea; 105 m. NE. Cartagena, and 175 m. WNW. Maracaybo. Lat. 11° 15′ N., long. 74° 18′ W. Pop. estimated at 6,000. It has some good houses, a cathedral, which is a conspicuous object in approaching it, both by land and sea, and some convents; but it suffered much from the attacks of the Indians during the revolutionary war, and does not appear to have regained its previous importance. Its harbour, which is one of the best on this coast, having sufficient depth of water and good holding-ground, is defended by several batteries, and by a castle on an insulated rock, commanding both the town and the harbour. Santa Marta was founded in 1525, and made an episcopal city four years afterwards. Before the revolution it had risen to considerable importance as a commercial city, and was the port into which manufactured goods for Bogota were almost exclusively imported.

MARTIGUES (LES), a marit. town of France, dep. Bouches-du-Rhone, on an island in the channel between the lagoon of Berre and the Mediterranean, on either bank of which channel are its suburbs of Ferrieres and Jonquieres, 18 m. WNW. Marseilles. Pop. 8,433 in 1861. Its situation, amid pools and canals, has made it be called the Venice of Provence. It is well built, and has several good streets and quays, and handsome buildings; but it is ill supplied with water. Its port is much resorted to by fishing-boats. Merchant vessels are built here; and it has an active trade in olive oil, fish, wine, and salt.

MARTIN (ST.), one of the Virgin Islands, in the W. Indies, belonging partly to the French and partly to the Dutch; about lat. 18° 4′ N., and long. 63° 5′ W.; between Anguilla and St. Bartholomew; 12 m. NW. the latter, and 75 m. NNW. Barbuda. Area estimated at 30 sq. m. Though hilly, it has no eminence 2,000 ft. in height. It is watered by numerous rivulets; and in the S. are numerous lagoons, from which great quantities of salt are obtained by the Dutch. The coasts, which are deeply indented, afford several good roadsteads, of which Philipsburg and Marigot are the best. The soil is light, strong, and frequently arid; but it is tolerably healthy. The northern and larger portion of the island belongs to France, forming a commune of the colony of Guadeloupe; and having an area of 5,371 hectares, of which, 1,841 are cultivated, 241 in pasture, 674 in woods, and 2,616 unproductive. The annual produce of sugar averages about 900,000 kilogs., syrup about 11,000 kilogs., and rum 50,000 gallons: many cattle are also reared. Pop. of the French division about 3,600, five-sixths of whom were slaves up to 1848. The southern, or Dutch, division of the island is less fertile and richly wooded than the French, but more profitable, on account of the salt it produces, which is sent to the neighbouring islands, and to N. America: it is also estimated to yield annually about 25,000 cwt. of sugar, and 130,000 galls. of rum. The Dutch portion is about as populous as the French. Nearly all the white pop. of St. Martin are of English descent. The Spaniards first colonised this island, but abandoned it in 1650; after which it became a subject of contention between the French and Dutch, who subsequently divided it between them. It has been frequently taken by the English.

MARTINIQUE, one of the Windward Islands, in the W. Indies, belonging to France; between lat. 14° 23′ 43″ and 14° 52′ 47″ N., and long. 60° 46′ and 62° 15′ W., about 25 m. SE. Dominica, and 20 m. N. St. Lucia; length NW. to SE., 38 m.; average breadth, about 10 m. Area estimated at 98,782 hectares. Pop. 135,991 in 1861. There was a decline of population of about 5,000 between the years 1851 and 1861. The surface of the island gradually rises on proceeding inland, and mountain ranges occupy the centre of the country. Their loftiest summits are the *Montagne Pelée*, towards the N. extremity of the island, and the *Piton du Carbet*; the former rises to 4,429 ft., the latter to 3,960 ft., above the sea. These, and other mountains, are evidently extinct volcanoes, having their characteristic conical form, and abounding with lava and other volcanic products. The flanks of the mountains are mostly covered with a dense and luxuriant forest vegetation, and are in many parts under culture to an elevation of 1,300 ft. About a third part of the island consists of pretty level land. It is watered by numerous rivulets; but of these only three or four, which disembogue on the W. coast, are navigable in any part of their extent. At the S. extremity of the island is a small salt-lake. The coasts present many bays and inlets, but the harbours on its E. side are difficult of access, being obstructed by numerous islets, and extensive banks of madrepore. On the S. side is the bay of Marin; and on the W. is that of Fort Royal, forming one of the best harbours in the Antilles: in the NW. is the roadstead of St. Pierre, where ships ride safely, except during W. winds. The mean annual temp. in the plains is about 81°, the maximum in the shade being 95°, and the minimum 69° Fah.; but the heat is tempered by sea-breezes during the day, and land breezes at night. The moisture of the atmosphere is excessive; and it is estimated that, at the level of the sea, 85 inches of rain fall annually. Most of this rain descends from July to Oct., a period of the year termed the *hivernage*; when the hurricanes, from which the island has often suffered severely, are most frequent. The weather for the remaining 9 months is generally fine; but Martinique, like the neighbouring island of St. Lucia, is very unhealthy. Mineral springs are abundant, of a chalybeate, saline, or siliceous nature, and useful in cutaneous and liver complaints. The surface consists chiefly of disintegrated pumice-stone, intermixed with vegetable mould, forming a light and very fertile soil. Of the land under cultivation in 1861, there were 20,516 hectares devoted to the sugar cane, the produce being 28,240,400 kilogrammes of sugar, 6,177,940 litres of syrup and molasses, and 4,545,200 litres of tafia, or rum. In the same year, there were under coffee 411 hectares, producing 155,875 kilogrammes of coffee, while 276 hectares, producing 8,894,450 kilogrammes, were devoted to cocoa, and 12,035 hectares to general provisions. Of secondary produce, there need be mentioned only cotton, planted, in 1861, on not more than 17 hectares, and producing 303,250 kilogrammes.

Digitized by Google

Of late years, agriculture has made considerable progress in Martinique. The plough has come more into use, and manuring is more extensively practised; and the culture of the sugar-cane, to which the colonists have turned their chief attention since 1820, has been greatly improved. The cane is of two kinds—the Otaheitan variety, and the yellow cane of Batavia. It was first naturalised about 1650. The coffee plant was introduced in 1723; but its culture, like that of most other products, is diminishing in favour of sugar. A few cloves, and some other spices, are grown; and the government has attempted, though hitherto with little success, to introduce the culture of indigo. Martinique formerly produced a large supply of tobacco, but it is now quite insignificant. Manioc, bananas, sweet potatoes, and maize are the principal farinaceous vegetables. The island has about 40,000 head of live stock, of all sorts; about 18,000 being black cattle, and 9,000 sheep. There are several earthenware and tile factories, and lime-kilns; these are, however, the only manufacturing establishments in Martinique. Carpenters, masons, and such-like workmen are pretty numerous, but there are few of any other description. A considerable number of people, including many of the emancipated slaves, are employed in fishing; and between 400 and 500 are occupied in navigation and the coasting trade. Subjoined is an account of the principal articles exported from Martinique in the year 1861.

Principal Articles	Destination of Exports	1861
		Francs
Sugar . .	To France . Total	16,558,619
Rum . .	To France . Total	1,529,401
Cocoa . .	To France . Total	268,793
Coffee . .	To France . Total	55,464
Codfish . .	To French Colonies .	92,964
	„ Foreign Countries	36,086
	Total . .	129,050
Wines . .	To French Colonies .	76,391
	„ Foreign Countries	122,813
	Total . .	199,204

The imports consist chiefly of salted meat, butter, and fish, corn flour, pulse, oils, timber; cotton, linen, and other manufactured goods; wines, soap, candles, hardware, jewellery, and apparel; chiefly from France and the French colonies. In 1861 the value of the imports amounted to 30,976,500 francs, or 1,239,060*l*. In the same year, 359 French vessels, of the aggregate burden of 58,457 tons, entered, and 339 left the ports of the island.

The government is vested in a governor, assisted by a privy council, composed of the military commandant, the 3 principal civil officers of the colony, and 3 privy councillors nominated by the king; and in a colonial council of 30 members elected for 5 years. Every individual of French descent, 25 years of age, born or having resided two years in the colony, and paying taxes to the extent of 300 fr. a year, or having property worth 30,000 fr., may be an elector; and inhab. paying taxes, or possessing property of double the above amount, are eligible to the colonial council. Martinique is divided into the arronds. of Fort Royal and St. Pierre, 4 cantons, and 26 communes. Justice is administered by a royal court at Fort Royal, courts of assize and primary jurisdiction in each arrond., a justice of the peace in each canton, and a functionary, uniting both the civil and military jurisdiction, in most of the communes. The military force amounts to 2,020 men, besides which there is a militia of 4,103 men. There are 3 schools of mutual instruction, 2 in the cap. and 1 in St. Pierre; and primary schools in almost every commune. At St. Pierre is a superior female seminary. There are orphan asylums, and various other charities, in the two principal towns.

Martinique has only three towns worthy of mention. Fort Royal, the cap. and seat of government, on the N. shore of the bay of same name, in the SW. part of the island. Pop., inc. com., 11,500. It is well built, its chief public edifices being the par. church, government offices, naval storehouses, arsenal, barracks, hospital, two prisons, and the residence of the *préfet apostolique*, the superior ecclesiastic of the island. It is defended on the N. by Fort Bourbon, and on the S. by Fort Louis, on a small peninsula, by which it is shut off from its port; but it communicates with the harbour by a canal, cut within a few years. Near Fort Royal are numerous pleasant country residences. St. Pierre, also on the W. coast, is the largest town in the French W. Indies. La Trinité, on the bay of the same name, on the E. side of the island, has a pop. of 4,600, large warehouses, a prison, some barracks, a hospital, and a handsome church. Its roadstead and harbour are secure; the latter has good holding-ground, but it is difficult of access. Its entrance was formerly protected by a fort, now in ruins.

This island was discovered by the Spaniards in 1493. In 1635 it was settled by the French. In 1762 the English took it from the latter, but restored it in the succeeding year. In 1794 it was again taken by the English, who gave it back in 1802; it came a third time into British possession in 1809, and was finally restored to France in 1815. Slavery was abolished here, as in all other French colonies, in 1848. The Viscount Beauharnais, and his wife Josephine, subsequently espoused by Napoleon I., were natives of Martinique.

MARYBOROUGH, an inland town of Ireland, Queen's Co., of which it is the cap.; prov. Leinster, on a branch of the Barrow, 46 m. SW. Dublin. Pop. 2,857 in 1861, against 3,633 in 1841. The town is straggling and meanly built. The new co. prison has 75 cells and 36 other prisoners' rooms. The district lunatic asylum has accommodation for 104 patients. It has three schools, one for boys, another for girls, and one for both, partly supported by and connected with the Educational Board. When the territory of Leix was made shire-ground, at the close of the reign of Philip and Mary, this place, previously a border fortress, was fixed on as the assize town, and named from the reigning queen. It changed masters several times during the war of 1641. It has several good public buildings, among which are the par. church, a Rom. Cath. chapel, a convent, Presbyterian and Methodist meeting-houses, the infirmary for the co., the district lunatic asylum lately erected for King's and Queen's Cos., Westmeath and Longford, the new co. court-house and prison, with barracks and schools. It is a constabulary station. The corporation, under a charter of Elizabeth, in 1570, consists of a burgomaster, two bailiffs, and an indefinite number of burgesses and freemen. It returned 2 mems. to the Irish H. of C. till the Union, when it was disfranchised. The assizes for the co. are held here; and general assizes in April and October, and

Digitized by Google

petty sessions weekly. Rathleague, the seat of Lord Congleton, and Ballyfin, the seat of Sir Charles Coote, are in the immediate vicinity of the town.

MARYLAND, one of the United States of N. America, on both sides Chesapeake Bay, between lat. 38° and 39° 40′ N., and long. 75° and 79° 20′ W., having N. Pennsylvania, W. and SW. Virginia, E. Delaware, and SE. the Atlantic. Area, 9,356 sq. miles; pop. 687,049 in 1861. The two portions into which Chesapeake Bay divides the state are called the E. and W. shores; the former being low, undulating, and alluvial, while that on the W. side, though at first of the same character, gradually rises on proceeding westward; and the NW. part of the state is traversed by some offsets of the Alleghanies, which have an elevation of about 3,000 ft. The Potomac, which divides the state from Virginia, and the Susquehannah, which falls into the innermost extremity of Chesapeake Bay, are the only considerable rivers. The climate of the hill country is healthy and agreeable; but along the coast the heats in summer are sometimes oppressive, and destructive fevers frequently prevail. The mean annual temp. at Baltimore is about 53° Fahr. The soil is particularly fertile in the valleys between the mountain ranges of the W.; but elsewhere it is of various qualities, and towards the coast is often sterile. Large quantities of excellent wheat, of a variety supposed to be peculiar to this state, is raised, especially on the E. shore: the crop, however, is rather precarious; and Indian corn is the principal produce. Tobacco is the other great staple, and is grown almost exclusively on the W. shore. (For an account of the quantities of these staples inspected in Maryland, see BALTIMORE.) Most part of the products of the more N., and some common to the more S. states, are cultivated. Fruits and sweet potatoes are grown in abundance; cotton is raised chiefly for domestic purposes; and hemp and flax are grown in the W. The forests abound with trees, producing *mast*, which feeds great numbers of hogs. Beef and mutton are plentiful, and large quantities of provisions are shipped from Baltimore. The fisheries are actively carried on in the bay and along the coast. Coal of good quality is found in the W. part of the state, in two principal fields, one of which extends over an area of 400 sq. m. Iron is everywhere abundant, and the bog-ore wrought on the E. shore yields at an average from 40 to 50 per cent. of metal. Sulphuret of copper, chrome and alum earths, green vitriol, and various fine marbles are among the other mineral products. The manufactures consist principally of coarse cotton fabrics, and of hardware, salts, and earthenware. The principal articles of export are flour and tobacco; and, next to these, lumber, iron, Indian corn, pork, flax seed, and beans.

The canals and railways of Maryland are on a large scale. The Chesapeake and Ohio Canal, intended to unite Georgetown, in the district of Columbia, with Pittsburg on the Ohio, was commenced in 1828, and completed in 1845. It is generally from 60 to 70 ft. wide, though in parts it is contracted to 50 and expanded to 150 ft.: its depth is 6 ft. The rise to William's Port, 105 m. from Georgetown, is 353 ft., which is overcome by 44 locks 100 ft. long by 15 ft. wide. There are in this distance 119 culverts and 6 aqueducts, one of which is 1,714 ft. long: the culverts, aqueducts, and locks are all built of solid stone masonry. The aggregate length of the railroads in Maryland, in 1863, amounted to above 500 miles; the Baltimore and Ohio railway is one of the most stupendous works of the kind undertaken in America. Its length is above 300 m., within which a rise of 885 ft. must be overcome. The legislative government is vested in a senate and a house of delegates, together styled the General Assembly of Maryland. The H. of Deleg., comprising 74 members in 1864, is chosen every second year by the votes of all the white male citizens above 21 years of age, who have resided a year in the state, and 6 months in the county for which votes are tendered. The senate, composed of 22 members in 1864, is elected every 6th year. The governor and executive council are elected annually by the people, and appoint all subordinate officers of state.

Annapolis is the seat of the state government; but Baltimore is the commercial capital, and, in pop. and importance, the fourth city of the Union. (See BALTIMORE.) Maryland is divided into 20 counties, Frederick, Hagursburg, and William's Port are the other principal towns, and 8 judicial districts, each comprising 2, 3, or 4 counties. Each of these districts has a chief judge and 2 associates, the 6 chief judges constituting the court of appeal for the state. Judges hold office during good behaviour. Maryland has a fund for the support of free schools, the revenue of which, in 1863, amounted to 154,073 dollars, and possesses several large and important colleges, including Maryland University and St. Mary's College, with a library of 12,000 vols., at Baltimore; St. John's College, at Annapolis; Mount St. Mary's, and at Emmitsburg. The agg. state debt amounted to 14,899,050 dollars on the 30th Sept. 1862. The inhabitants are mostly Roman Catholics or Methodists.

Maryland was first colonised by Lord Baltimore, and about 200 Rom. Catholic emigrants in 1634. It remained a proprietary government until the revolution of 1688, when it became a royal prov.; but in 1716 it was restored to the descendants of its original possessor, and retained by them till the independence of America. Its constitution was formed in 1776, and dates next in order to that of Virginia; it has, however, received several important alterations and amendments at different periods.

MARYPORT, a sea-port town of England, co. Cumberland, par. of Cross Canonby, Allerdale Ward, on the Solway Frith, close to the mouth of the Ellen, 25 m. SW. Carlisle, on the Carlisle and Maryport railway. Pop. 6,037 in 1861. The town is neat and well-built, and, from its salubrity, is much frequented by summer visitors. A modern town-hall and sundry places of worship are its chief public edifices. A national school furnishes instruction to children of both sexes, and there is a school of industry for girls. The present importance of Maryport, which, in 1750, was a mere hamlet, is attributable to the rise of an extensive coal-trade with Ireland and Scotland. It has also ship-building yards; and sail-cloth, ropes, and blocks are made on a pretty extensive scale. A pier has been erected, and there are commodious quays and staiths; but the harbour dries at low water, and has only 12 ft. at high water springs, and 8 at neaps.

MASCALL, a town of Italy, island of Sicily, intend. Catania, cap. canton, at the E. base of Mount Ætna, on a small river, about 2 m. from the sea, and 10 m. SW. Taormina. Pop. 3,068 in 1862. Its district is exceedingly fertile, and the town was formerly flourishing, but it is now rapidly decaying, while several of its dependent villages are proportionally thriving and increasing, particularly Giarre and Riposto.

MASSA-CARRARA (former DUCHY OF). See MODENA.

Digitized by Google

MASSACHUSETTS, one of the U. States of N. America, in the N. part of the Union, in the dist. known by the name of New England. Massachusetts, though comparatively small, is one of the most important and flourishing states forming part of the great republic. It extends between lat. 41° 13′ and 42° 52′ N., and long. 69° 59′ and 73° 30′ W.; having N. Vermont and N. Hampshire, W. New York, S. Connecticut and Rhode Island, and E. the Atlantic, the islands of Martha's Vineyard and Nantucket being comprised in this state. Greatest length, WNW. and ESE., 190 m.; ordinary breadth, between 40 and 50 m.; area, 7,800 sq. m. Pop. 1,231,066 in 1860. In 1830, the pop. was 610,408. Generally speaking, the country ascends according to the distance inland, the general slope being from W. to E. The coast presents a capacious, deep, and admirable bay, between Cape Ann and Cape Cod; from which the state has derived its name. A sandy and in some parts marshy plain extends several miles into the interior: this is abruptly succeeded by a hilly country, which occupies all the central parts of the state, abounding with valleys of various extent, numerous rivers, and extensive pine plains. The valley of the Connecticut river separates this region from the third, or mountainous, or most westerly division of the state. It is well watered, but no large river rises within it. Next to the Connecticut, the chief is the Merrimac, which runs through its NE. parts, and falls into the sea near Boston. There are no large lakes, but numerous ponds. The climate varies according to elevation; but is generally dry and healthy, and the atmosphere serene. The thermometer, it is said, in the plains, during summer, often exceeds 77° Fahr., and sometimes rises to 100°. In some of the central and W. districts the soil is strong and rich; but in general it is poor rather than otherwise, though the active perseverance of its inhab. and good cultivation have rendered it highly productive. In no part of the U. S. have greater advances been made in agriculture, but latterly the pre-eminence of Massachusetts in this respect has not been maintained, and her crops have declined. Maize, rye, wheat, oats, barley, peas, beans, buckwheat, potatoes, hops, flax, and hemp are the chief agricultural products. Great quantities of cider also are made, and fruits and garden vegetables extensively grown. But, notwithstanding, Massachusetts is indebted to the Southern states, especially to N. York, Maryland, and Pennsylvania, for by far the largest portion of her supplies of flour and corn; and to these and the other states she is indebted for cotton, staves, and coal. Beef, pork, butter, and cheese are of excellent quality, and so abundant as to form a considerable article of export; the W. part of the state is especially distinguished for its extensive dairies. Travellers speak in high terms of the cheerful appearance and flourishing condition of the rural districts of Massachusetts. The whole of the villages, from Northampton to Boston, Belchertown, Ware, and Worcester are handsomely laid out, and comfortable places; and every thing about them is so neat, and so much in order, that it is delightful to see them. About Northampton there is more appearance of real comfort and beautiful village scenery than I have seen any where else. Agriculture is here, however, of inferior importance to manufactures and commerce, in which Massachusetts ranks second perhaps to no state in the Union, unless it be New York. Nearly a hundred millions of dollars are said to be invested in manufacturing stock, of which a large proportion is employed in Lowell, which, next to Pittsburg, is the chief manufacturing town in the U. States, and may be styled the Manchester of America. (See LOWELL.) Next to cotton goods, boots and shoes are the chief manufactured articles; from 3 to 4 million pairs are annually made at Lynn and other places in this state, principally for export to the Southern states and the W. Indies. Spirits, leather, cordage, wrought and cast iron, nails, woollens, paper, straw bonnets, hats, oil, and muskets, are the other principal manufactures. There is a large national establishment for the manufacture of arms at Springfield. There are numerous iron mines, and some also of lead. Excellent marble and granite, slate, and lime-stone are obtained. The whale, cod, and other fisheries of the U. States centre principally in Massachusetts, and are at once a principal employment and a most productive source of wealth. The chief exports of this state, exclusive of its manufactures and the produce of its fisheries, are beef, pork, lumber, spirits, and flax seed. During the year 1862, the total value of the imports into the state amounted to 23,826,260 dollars, while the total exports of domestic and foreign produce were of the value of 16,572,736 dollars. The number of vessels which cleared at ports in Massachusetts, in 1862, was 3,088, of 599,176 tons burthen; while there arrived 3,427 vessels, of 735,494 tons.

Till lately the legislature of Massachusetts had a greater number of members than that of any other state of the Union; but the amended constitution of 1840 reduced the senate to 40 mems.; and the number of representatives to 240, elected annually by the people. The right of election is in every male citizen 21 years of age who has resided within the state for a year, and within the town or district for which he desires to vote for 6 months preceding the election. Elections take place annually for senators, representatives, the governor, lieutenant-governor, and a council of 9 mems., intended to assist the executive, and chosen from among the people at large by a joint vote of the senators and representatives. The salary of the governor is 3,500 dollars a year. The supreme court of justice sits at Boston; it consists of a chief justice, 4 assistant judges, and other officers. There is a court of common pleas, and other courts are established in each co.: the different judges of all the courts are appointed by the governor and council, and hold office during 'good behaviour.' Every able-bodied white male citizen between 18 and 45 (with certain exceptions) is required to enrol himself in the militia; but the active militia consists of only 10,000 men, called out at different times. Education is very widely diffused. The number of public schools, in 1862, was 4,605, and the number of scholars of all ages 223,218, out of a population of 234,252, between the ages of five and fifteen. The principal educational establishments are — Harward university, near Boston; Phillips, Dummer, Leicester and Derby academies; William's and Amherst colleges; several theological seminaries, and other special schools. Learned societies, mechanics' institutes, lyceums, reading societies, and public libraries are numerous. The number of churches as compared with the pop. is greater in this than in any other state of the Union; and the inhabs. are distinguished by their industry, sobriety, and good morals. The public debt at the close of 1863 amounted to 11,129,578 dollars.

This state was first permanently settled by a party of emigrants from England, who landed at Plymouth in 1620. Another settlement was formed at Salem in 1628, and both were united by charter under the same government with Maine in 1692. The first engagement with the forces of the mother country occurred at Lexington in this

Digitized by Google

state, 19th April, 1775. Massachusetts sends ten members to congress.

MASSA-DUCALE, or DI-CARRARA, a town of North Italy, prov. Massa e Carrara, on the road between Genoa and Leghorn, 3 m. from the Mediterranean, and 28 m. NW. Lucca. Pop. 15,068 in 1862. The town is distinguished by the beauty and salubrity of its situation, and is clean and well built; but has few remarkable editices. Its ancient cathedral was pulled down by Eliza Bacciocchi, sister of Napoleon, when queen of Etruria, on account of its being too near the royal palace. It has an academy of sculpture and architecture, a seminary, college, hospital, public library, and an old castle now used as a prison. It is the see of a bishop, and has manufactures of silk stuffs and some trade in soap, oil, and other agricultural products, and in the fine marble of its vicinity.

MASSAFRA, a town of Southern Italy, prov. Lecce, cap. canton, on the road from Bari to Taranto, 10 m. NW. the last named city. Pop. 9,942 in 1862. Massafra is prettily situated on the slope of a hill interspersed with tufts of trees and shrubs; but, when near it, it assumes a most singular appearance. The rock on which it stands is perforated and worked into a thousand fantastic shapes. The houses stand on the brink of a narrow valley, or rather chasm, worked through the rock by the action of running water. The town is walled, and is conjectured by some authors to occupy the site of the *Messapia* of antiquity; but others contend that Messagna, between Oria and Brindisi, is the modern representative of that city.

MESSAT, a town of France, dép. Ariège, cap. cant. in a fertile valley, 14 m. WSW. Foix. Pop. 4,031 in 1861. There are in its vicinity numerous iron mines, the working of which employs a considerable portion of the people.

MASUAH, the principal sea-port of Abyssinia, on the Red Sea, on an island separated from the continent by the narrow but deep channel of Adowa, 250 m. NE. Gondar, and 420 m. S. by E. Djidda; lat. 15° 30′ 45″ N., long. 39° 24′ E. Pop. estim. at 12,000 in 1862. The island in which Massuah stands is only about ½ m. in length and ¼ m. in breadth, one-third of its extent being occupied by houses. The town has several stone houses, two stories high; but most of them are in ruins. The other dwellings are mere huts, built, as in Arabia, with poles and bent grass. The only public buildings are four mosques, of small size and rude architecture. Owing to the total absence of springs, water is very scarce, and is collected in large public tanks, that occupy nearly a third part of the island. The harbour, though having a narrow entrance, can accommodate about fifty vessels; and is safe, deep, and easily accessible. The trade carried on between Masuah and the ports of Arabia is of considerable importance. From Djidda are brought many articles of European manufacture, embroidered velvets, arms, glass-ware, silks, and satins; while Mocha furnishes Indian fabrics of every quality, from the finest muslins to the coarse Surat cloths, used as articles of dress in a great part of Africa. The exports comprise a considerable number of slaves, gold-dust, ivory, rhinoceros' horns, and corn, brought from the interior by a large caravan, which arrives in Feb. The Naybe demands 10 per cent., *ad valorem*, on all exports and imports, and the same amount of duty is levied by the Imam.

MASULIPATAM. See CIRCARS (NORTHERN).

MASULIPATAM, a fortress and town of British India, presid. Madras, cap. of the above dist., on the Coromandel coast, 230 m. NNE. Madras; lat. 16° 15′ N., long. 81° 14′ E. The fort is of an oblong figure, 800 yds. by 600, in the midst of a salt morass, and close to a canal communicating with the Krishna. By means of this canal, the surrounding country may be entirely inundated, a circumstance constituting the chief strength of the place. The *pettah*, or native town, is about 1½ m. to the NW.; it is very extensive, and, for a Hindoo town, tolerably well built. Masulipatam stands on the only part of the Coromandel coast which is not beat with a heavy surf. Its port receives vessels of 300 tons; and it was for a lengthened period a place of considerable trade with Bengal, China, Birmah, Persia, and Arabia. Its commerce is now, however, greatly fallen off, and scarcely extends beyond Calcutta on one side and Bussorah on the other. Its chief exports are piece goods and tobacco. The chintzes of Masulipatam, though not equal to those of Europe, have been long and deservedly celebrated, and are very generally worn in some parts, especially in Persia. This town is the residence of the district collector and judge. It was conquered by the Bhamenee sovereigns of the Decca, in 1480, ceded to the French in 1751, and taken by the British in 1759.

MATANZAS, a sea-port town of Cuba, ranking next to the Havannah, in commercial importance, on the N. coast of the island, at the bottom of a deep bay, 52 m. E. Havannah; lat. 23° 2′ 28″ N., long. 81° 37′ 44″ W. Pop. 19,852 in 1857. The town is pretty well built, has some good streets, and about one-third part of its houses are of stone. It has a large hospital, a good par. church, barracks, theatre, two market-places, and two printing offices; and in the neighbourhood is a considerable sugar refinery, belonging to an English firm. The bay of Matanzas, defended by the castle of San Severino, is extensive, and is exposed only to the NE. wind. The harbour, in front of the city, is protected by a ledge of rock, 4 ft. below the surface, which serves as a natural breakwater, to defend the vessels at anchor within it from the swell. There are two channels by which to enter, the one by the N., the other by the S. end of the ledge; but the S. channel is fit only for coasting vessels. There are two rivers, one on each side of the town, which deposit so much mud at their mouths as greatly to diminish the extent of the anchorage ground, and render it necessary to load and discharge the shipping by lighters and launches.

Matanzas, though situated in one of the most fertile districts of this noble island, was an inconsiderable place till within the last forty years. Under the old colonial government it was merely a subsidiary port to the Havannah, and was not allowed to carry on any direct intercourse with foreign countries; but this impolitic restriction being removed in 1809, Matanzas immediately became the centre of a considerable trade; and the town and its commerce have since continued to increase, with the rapidly increasing cultivation of sugar and coffee, and other colonial staples in the adjoining districts.

MATARO (an. *Illuro*), a sea-port town of Spain, in Catalonia, 20 m. NE. Barcelona. Pop. 15,860 in 1857. The more ancient or Moorish portion of the town stands on a slight eminence, at a short distance from the shore, and is surrounded by walls: its streets are narrow and crooked, with the exception of the Riera, which is wide and straight, lined with rows of trees, and forming an agreeable promenade. The new town, which stretches eastward along the sea-shore, is much larger and more regularly built, with wide streets and respectable houses. A parish church and a general hospital, with two or three large buildings, formerly used as monasteries, are the only public edifices. The town is celebrated for the excellence of its red wine and brandy, much of which is ex-

Digitized by Google

ported to the U. States. Its cloth fabrics have much declined; but, since the emancipation of the colonies, its exports of cotton-prints, ribands, and lace have become quite inconsiderable. The port has a ship-building yard, and there is good anchorage for merchant-ships close in shore. The neighbourhood is very picturesque, and the country-houses and cottages have an air of greater neatness and comfort; the windows are glazed, and the insides of the dwellings display a good stock of furniture. No beggars and fewer ragged people are seen; industry is evidently active; the ground is better cleared, fences (made of the American aloe) are more general and more neatly constructed; nobody is seen basking in the sun. In short, there is a new order of things, quite different from that seen in any other part of Spain.

MATHURA, or MUTTRA, a celebrated town and place of pilgrimage in Hindostan, prov. Agra, on the Jumna, 30 m. NW. Agra; lat. 27° 31′ N., long. 77° 33′ E. It is highly venerated by the Hindoos, from its being the birthplace of their deity Krishna, and consists chiefly of one continued street of temples and ghauts, which, though they do not exhibit the architectural magnificence of similar structures in S. India, have, nevertheless, considerable elegance and richness. Mathura was taken in 1019 by Mahmoud of Ghiznee, who despoiled it of an immense quantity of gold, silver, and gems, threw down many of its temples, and desecrated others by converting them into mosques. Under Acbar and his successors, however, the Hindoos were permitted to rebuild and improve the city; and a temple, erected about that period, is said to have cost 60 lacs of rupees. But this splendid edifice was destroyed by Aurungzebe, who built on the spot a mosque with the materials. Another large mosque, built by a Mohammedan governor, is now in a state of decay. Some extensive cantonments are separated from the town by an interval of broken ground covered with ruins. Mathura has a fort, in which is an observatory, founded by the rajah Jye-Singh of Jyepoor. At the end of the last century it was the head-quarters of the commander of Scindia's infantry: it was however taken, without opposition, by the British in 1803.

MATLOCK, a village and par. of England, celebrated for its mineral waters, hund. Wirksworth, co. Derby, on the Derwent, 14 m. N. by W. Derby, 125 m. NNW. London by road, and 141 m. by Midland railway. Pop. of par. 4,252 in 1861. Area of par. 3,960 acres. The place is beautifully situated, partly in a valley and partly on the slope of a hill rising E. from the Derwent, here crossed by a neat stone bridge: the houses are chiefly of stone. The church, picturesquely situated on the brow of a rock, rising perpendicularly above the river, and embosomed in trees, is a small edifice, in the perpendicular English style, with a square tower at its W. end: the living is a rectory, in the gift of the dean of Lincoln. There are four places of worship for Wesleyan Methodists, Independents, and other dissenters, with attached Sunday schools, providing religious instruction for between 400 and 500 children of both sexes. There is also an endowed school, for clothing and educating 30 boys. There are some manufactures of cotton and paper, and the lead mines in the neighbouring hills employ about 150 hands. A museum of mineralogy contains a great many valuable specimens of ore peculiar to this district. Visitors purchase considerable quantities of Derbyshire spar; but the chief dependence of the inhab. is on the supply of those who come here during summer, to use the mineral waters, which are considered beneficial in cases of glandular affections, scrofula, bilious disorders, pulmonary complaints, and diabetes. The springs, which first attracted notice for their medicinal qualities in 1698, when the first, or old, bath was built, are about 1½ m. S. of Matlock, on the W. bank of the river; and here are the hotels, libraries, and lodging-houses, to which the visitors chiefly resort. Other two springs have been discovered, each of which is now enclosed, with a handsome edifice, conveniently fitted up with baths and pump-rooms. The waters have a temperature of about 66° or 68° Fahr., and hold in solution only a small quantity of carbonate of lime, their specific gravity being less than that of ordinary water: it would hence appear, though having a lower temperature, greatly to resemble the Buxton and Bristol waters.

The scenery of Matlock-dale is peculiarly picturesque and romantic, diversified with rugged beetling crags, strongly contrasted with the fine verdure of the valley; the most prominent objects being the High Tor and Masson Hill. The former rises almost perpendicularly about 300 ft., the upper half of which is a broad mass of naked brown rock, from which fragments often fall into the river which flows immediately below, obstructing the channel, and greatly increasing the impetuosity of the stream after heavy rains. Opposite the High Tor, but of a less bold though loftier character, is Masson Hill; on the summit of which are the heights of Abraham, rising about 750 ft. above the river, and not only overlooking the whole dale, but commanding an extensive prospect over a considerable part of Derbyshire. Willersley Castle, the seat of Mr. Arkwright, son of the great founder of the cotton manufacture, stands on a commanding eminence E. of the Derwent.

MAUCHLINE, a neat village of Scotland, co. Ayr, on an eminence 1 m. N. from the river Ayr, 27 m. S. by W. Glasgow. Pop. 1,414 in 1861. The only public buildings are the par. church, Free church, and a chapel of the Associate Synod. It has a woollen mill, which employs about 25 hands; and hand-loom weaving and tambouring for the Glasgow manufacturers employ about 200 hands. It has also a manufacture of beautifully jointed and varnished wooden snuff-boxes, similar to those made at Cumnock and Laurence Kirk.

This place, trifling as it is, has been 'married to immortal verse.' Burns lived for nearly 9 years at the farm of Mossgiel, ½ m. N. of the village; and Mauchline was the birthplace of 'bonnie Jean,' and is the scene of two of his inimitable poems, 'The Jolly Beggars' and 'The Holy Fair.'

MAULMAIN, or MOULMEIN, a sea-port town of India beyond the Ganges, cap. British prov. Martaban, at the mouth of the great river Thanlueng, having N. the Birmese town of Martaban, on the opposite side of the river, and W. the island of Balu, which serves as a natural breakwater to defend the port from the heavy seas that would otherwise be thrown in from the W.. 100 m. SSE. Rangoon, 27 m. NNE. Amherst; lat. 16° 29′ 36″ N., long. 97° 35′ 6″ E. It was founded so late as 1825, when the site was selected by Sir A. Campbell, as eligible as well for a commercial as a military station. It is about 200 ft. above the level of the river, and extensive and fertile plains stretch eastwards from it towards the mountains. Its port is good, and, from its extensive command of internal navigation, it promises to become a considerable emporium. The principal articles of export are teak timber and rice; but there is also a considerable export of Pegu cutch, stic-lac, betel-nut, ivory, cocoa-nut, sapan wood, and rice. The imports consist of European cotton goods and marine stores. The principal trade of the place is with Calcutta, Madras, Rangoon, and Penang.

Digitized by Google

The principal article of commerce at Maulmain is teak timber, with which from 25 to 30 ships annually load for England. Ship-building is well adapted to the place, and some of the finest teak ships in the world have been built here. There are several dry docks, though not of a very efficient description, for repairing vessels.

MAURA (SANTA) (an. *Leucas*), one of the Ionian Islands, off the W. coast of and belonging to Greece, and separated from it only by a channel about 100 yards broad, and so shallow as in some places to be fordable: 48 m. SE. Corfu, and 7 m. N. Cephalonia, its cap. Amaxichi being in lat. 38° 50′ 15″ N., long. 20° 43′ E. Length, 23 m.; average breadth 8 m; area, 156 square miles. Pop. 20,797 in 1861. The island is intersected by a chain of mountains, running N. and S. through its whole extent, and rising in some places to the height of 3,000 ft., whence secondary ridges branch off in various directions, forming a few small valleys admitting cultivation; but most of the produce is raised on a narrow strip of land, stretching about 20 m. along the NW. side of the island, and comprising the residences of the greater part of the pop. The soil is generally very scanty; and many parts of the surface exhibit nothing but bare rock, interspersed with small patches of verdure: indeed, only about one-eighth part of the surface is capable of cultivation. In the valleys, the soil is either alluvial, or a red loamy earth, tenacious of moisture. There are no rivers; and, though numerous torrents flow from the mountains during the winter months their channels are quite dry in the summer. There is a winter lake, about 6 m. S. of Amaxichi, in the bottom of a valley, surrounded by lofty mountains, which dries in summer and produces rich crops. At the S. end of the island is a shallow lagoon, called the Venetian harbour, now rapidly filling up by the accumulation of sand and mud, the banks of which are said to be exceedingly unhealthy. The temperature of Santa Maura, like that of the other islands, is extremely variable, the thermometer in autumn often rising or falling 20° in 24 hours. In the valleys it seldom falls to the freezing point, but occasionally there is snow on the hills. The quantity of rain, and the seasons in which it falls, are much the same as in the adjacent islands. The low grounds are very unhealthy, and fever usually prevails at Amaxichi during summer, attended with a mortality in some years of 1 in 19 of the pop.: indeed, most of the natives, except those living on the mountains, present a very sickly appearance. The quantity of corn raised in the island is barely sufficient for half the consumption of its inhab.; but wine, olive oil, and several varieties of fruit, are produced in great abundance. The sides of the hills afford excellent pasture, and are grazed by large numbers of sheep and goats. Game is plentiful, and bees form an object of rural economy. The salt-pans near Amaxichi produce annually from 5,000 to 6,000 tons of basalt, which, as well as wine, oil, and cotton, are the chief articles of export. The inhab. are of Greek origin, and belong to the Greek church. Many of them are employed as fishermen and sailors; while others, especially at harvest-season, cross to the continent in quest of agricultural employment.

It has several good ports and some towns, but none is of any importance, except the cap. AMAXICHI (which see).

The ancient Leucas once formed a part of the continent; for Homer expressly terms it Ἀκτὴν Ἠπείροιο, in opposition to Ithaca and Cephallenia. So late as the time of Thucydides, the Peloponnesian fleet was more than once conveyed across the isthmus; and Livy informs us, that it had its peninsular shape even in the Macedonian war. '*Leucadia nunc insula, et vadoso freto, quod perfossum manu est, ab Acarnania divisa, tum peninsula erat, occidentis regione arctis faucibus cohærens Acarnaniæ. Quingentos ferme passus longæ fauces erant: latæ haud amplius centum et viginti. In his angustiis Leucas posita est, colli applicata verso in orientem et Acarnaniam.*' (Hist., lib. xxxiii. 17.) The cut here mentioned, called Dioryctus, was 3 stadia in length, and, in Strabo's time, was crossed by a bridge. The famous Leucadian promontory (now *Cape Ducato*) is a long ridge of white marble rocks, projecting S. about 2 m., terminating in a precipice 200 ft. high. It was surmounted by a temple of Apollo, and Virgil represents it as an object of dread to mariners:—

> 'Mox et Leucatæ nimbosa cacumina montis,
> Et, formidatus nautis, aperitur Apollo.'
> Æn. iii. 274.

but it is wholly indebted for its immortality of renown to its being

> 'The Lover's refuge, and the Lesbian's grave.'

—the spot whence Sappho precipitated herself into the ocean, resolved either to recover the affections of Phaon, or to die in the attempt. (See Ovidii Epist. Sappho Phaoni, lin. 165, &c.)

Not far from the promontory stood the very ancient town of Nericum, mentioned by Homer as εὐκτιμένον πτολίεθρον, 'a well-built city,' and of which there are still some small vestiges. The position of the ancient Leucas is fixed by Livy in the above passage close to the narrow strait which divides the island from Acarnania; and Dr. Holland mentions the ruins of an ancient town about 2 m. S. of Amaxichi, exhibiting the remains of massive old Greek walls, ascending a narrow ridge near the sea, and of numerous sepulchres, which appear among the vineyards covering its declivity. (Travels in Greece, p. 63.) The modern history of Santa Maura is closely connected with that of the IONIAN ISLANDS.

MAURITIUS (THE), or ISLE OF FRANCE, an island in the Indian Ocean, belonging to Great Britain, situated between 19° 58′ and 20° 32′ S. lat., and 57° 17′ and 57° 46 E. long., from 70 to 80 m. NE. the Isle de Bourbon, and 500 m. E. Madagascar. It is an irregular oval; length, NE. to SW., about 36 m.; breadth varying from 18 to 27 m. Area 676 square miles; pop. 313,462 in 1861, including a garrison of 2,350 men. The aspect of the Mauritius, from whatever quarter it is approached, is singularly abrupt and picturesque. The land rises rapidly from the coast to the interior, where it forms three chains of mountains, from 1,800 to 2,000 ft. in height, intersecting the country in different directions. Except towards the summit, these are generally covered with wood, and in many parts cleft into deep ravines, through which numerous rivulets find their way to the low grounds, and terminate in about 20 small rivers, by which the whole line of coast is well watered, from the foot of the mountains to the sea. Though, from its mountainous and rugged character, a great part of the interior is not available for any useful purpose, yet extensive plains, several leagues in circumference, are to be found in the high lands; and in the valleys, as well as along the coast, most of the ground is well adapted either for the ordinary purposes of agriculture, or for raising any description of tropical produce. Extensive forests still cover a considerable portion of the districts of Mahébourg, the Savanna, and Flacq, and in the centre of the island are several small lakes. The soil, in many parts, is exceedingly rich, consisting either of a black vegetable

Digitized by Google

mould, or a bed of stiff clay of considerable depth: occasionally the clay is found mixed with iron ore, and the *débris* of volcanic rock. In the neighbourhood of Port Louis, and generally in the immediate vicinity of the sea, there is but a scanty covering of light friable soil over a rocky surface of coralline formation. The whole coast is surrounded by reefs of coral, with the exception of a few openings, through which vessels can approach the shore; and at these points the different military posts for the defence of the island have been established. There is a marked difference in the climate of this island in different situations; the windward (or SE.) side enjoying a lower temperature by several degrees than the leeward (NW.), owing to the cooling influence of the SE. breeze, which prevails during most part of the year.

As regards temperature, rain, physical aspect, and diversity of climate, the island exhibits a very striking resemblance to Jamaica; though, being S. of the line, the seasons are reversed; summer extending from Oct. to April, and winter during the rest of the year. The principal rainy season is from the end of December to the beginning of April, but showers are frequent at all times. Hurricanes are of frequent occurrence, and create great devastation, with much loss of life; they principally occur in January, February, and March. So far as can be ascertained from the statistical returns of the island, the climate does not exert any prejudicial influence on the health of the white resident pop., though it is by no means favourable to the negro race.

Previously to 1825, the sugar and other articles imported from the Mauritius into Great Britain were charged with the same duties that were laid on such articles when imported from India. But, at the latter epoch, the produce of the Mauritius was admitted into our markets at the same duties as W. Indian produce, which were then materially lower than those imposed on the produce of our Eastern possessions. This alteration of the duties gave a great stimulus to cultivation in the Mauritius, particularly to that of sugar, which has since been raised, to the almost total exclusion of coffee, cotton, and indigo, that were previously produced in considerable quantities, the coffee especially being of excellent quality. Wheat and maize are raised in small quantities, with yams, manioc (introduced by the French), potatoes, bananas, and other vegetables. But the island is almost wholly indebted for its supplies of provisions to Hindostan, the Cape of Good Hope, Madagascar, and the Isle de Bourbon. Next to sugar, black wood, or ebony, of which there is an immense supply, and tortoise-shell, are the principal articles of export.

The produce of sugar in the Mauritius amounted, in 1812, to less than *one* million lbs. In 1814 it amounted to 1,034,294 lbs.; and, in 1818, to about 8,000,000 lbs. Since then, but especially since the modification of the duties in 1825, there has been a most extraordinary increase in the growth of sugar in this island. The value of the exports of sugar amounted to 2,109,166*l.* in 1860; to 1,771,867*l.* in 1861, and to 2,233,157*l.* in 1862. The extraordinary extension of the sugar culture has diverted the attention of the planters from the culture of the other great colonial staples. The exports of rum, the most important next to sugar, amounted to 26,259*l.* in 1861, and to 25,619*l.* in 1862. Rice is a large article of import; it is brought, as well as a considerable quantity of wheat, principally from India. Provisions are imported partly from the Cape, and partly from Madagascar.

The emancipation of the slaves in the Mauritius does not appear to have been nearly so prejudicial to agriculture as in the W. Indies. This arose from the circumstance of its being comparatively easy to fill up the deficiency in the supply of labour caused by this measure by importations of hill-coolies and other Indians. There arrived, in 1860, 9,070 males and 4,216 females, while in 1861 the arrivals were 10,232 males and 3,753 females, and, in 1862, 7,440 males and 2,453 females.

The government is vested in a governor, with a salary of 7,000*l.* a year, and a colonial legislative council, subordinate to the orders of the sovereign in council. The governor is aided in his duties by an executive council, composed of the military officer second in command, the colonial secretary, and the advocate-general. The legislative council is composed of 17 members, 10 of whom hold no official situation. Justice is administered in a supreme civil and criminal court, with three judges, a petty court from which there is no appeal, and such other minor courts as the governor may see fit. Several provisions of the old French law continue in force. The public revenue in 1863 amounted to 518,278*l.*, and the internal colonial expenditure to 482,524*l.* The greater portion of the revenue is derived from the customs' duties received at Port Louis.

Port Louis, or NW. port, the cap. and seat of government, is on the NW. side of the island, in lat. 20° 9′ 6″ S., long. 57° 28′ 41″ E. It is situated at the bottom of a triangular bay, the entrance to which is rather difficult. Every vessel approaching the harbour must hoist her flag and fire 2 guns; if in the night, a light must be shown, when a pilot comes on board, and steers the ship to the entrance of the port. It is a very convenient port for careening and repairing, but provisions of all sorts are dear. In the hurricane months, the anchorage of Port Louis is not good, and it can then only accommodate a few vessels. The streets are tolerably regular; but the houses are low, and are principally built of wood. It has extensive, but generally very filthy, suburbs. It suffered severely from fire in 1816, and from the cholera in 1819. The town and harbour are strongly fortified. At the W. extremity of the town are some extensive and commodious barracks; and about ¾ m. distant is the hospital, on a peninsula of coral rock, jutting into the sea. Mahébourg, in a healthy situation on the SE. coast, with an excellent harbour, was opened to ships from distant countries in 1836.

The Mauritius has numerous small dependencies between lat. 3° and 20° S., and long. 50° and 70° E. The chief of these are the Seychelles Islands, between lat. 4° and 5°, about 930 m. N. from the Mauritius; one of which, Mahé, is 16 m. long by from 3 to 4 m. broad; fertile, well-watered, very healthy, and having a pop. of about 7,000. Mahé, its chief town, has on its NE. side about 100 wooden houses, and a garrison of 30 men.

The Mauritius was discovered, in 1505, by the Portuguese. The Dutch took possession of it in 1598, and named it Mauritius, in honour of Prince Maurice. They made a settlement in it in 1644, which, however, they abandoned early in the next century. The French having, in 1657, occupied Bourbon, sent occasional settlers to the Mauritius, and, on its evacuation by the Dutch, they established a regular colony in the island in 1715, of which, however, they did not take formal possession till 1721. But the real founder of this important settlement was the celebrated M. de la Bourdonnaye, appointed governor in 1734. The Isle de France had hitherto been neglected for that of Bourbon, and was, at the arrival of the new governor, in the most impoverished and disordered state imaginable. But M. de la Bourdonnaye immediately perceived the importance of the island,

Digitized by Google

which its two excellent harbours rendered of the greatest consequence to any European power having, or wishing to have, possessions in India; and he set about its improvement with a zeal, sagacity, and success that have rarely been equalled, and never surpassed. Besides extending the culture of the sugar cane, coffee, cotton, and indigo, he introduced the manioc from S. America, and cinnamon, cloves, and pepper from the Dutch islands; though the latter, with the exception of cloves, have not answered his expectations. He fixed the seat of government at Port Louis, which he may be said to have created as well as fortified: and constructed numerous roads, aqueducts, and other useful public works. His administration continued only for 11 years; and in that short space he contrived to change the whole aspect of the country, and rendered it a most prosperous and valuable colony. Even after the possessions of France in India had all fallen into our hands, the Mauritius continued to be of importance to her, and proved how justly M. de la Bourdonnaye had appreciated its capabilities as a naval station. It was estimated that, during the first 10 years of the last war, the value of the British ships captured by privateers and other cruisers from the Mauritius amounted to 2,500,000*l*. At length, a formidable armament being sent against it in 1810, it surrendered to British arms, and was definitively ceded to Great Britain in 1815.

The island is the scene of St. Pierre's inimitable tale of Paul and Virginia. The wreck of the St. Geran, so striking and affecting an incident in the story, is a real event, which took place on the 18th of August, 1744.

MAYBOLE, a bor. of barony and market town of Scotland, co. Ayr, distr. Carrick, of which it is the cap., on the slope of a hill with a S. exposure, 8 m. S. Ayr, and 38 m. S. by W. Glasgow. Pop. 1,945 in 1861. The town consists mainly of an antique well-built street, interspersed with numerous modern buildings. The superiority of the old houses is owing to Maybole having been, in ancient times, the town residence of the aristocracy of Carrick, and the remains of sundry baronial mansions are still more or less entire. Of these the most imposing is 'the castle,' once occupied by the earls of Cassilis, ancestors of the marquis of Ailsa. It has been completely repaired and renovated. The bor. has a par. church, a Free do., and a U. Presbyterian chapel. Handloom weaving, in connection with Glasgow, is extensively carried on, employing from 600 to 800 hands. The weavers are mostly Irish; boys and females engage in the work, and perpetuate the poverty inseparable from the business. A weekly market is held in the town, and it has two branch banks, and a savings' bank. The parish school and the other schools bear a good character. There are two subscription and two circulating libraries. Some of the best farming in Scotland may be seen in the vicinity of Maybole.

Maybole, being the cap. of the bailiery of Carrick, was the seat of the courts of the district previously to the abolition of hereditary jurisdictions in 1747. The remains of Crossraguel Abbey are situated near the town, on the W. A celebrated disputation, which lasted three days, between Quintin Kennedy, one of its abbots, and John Knox, took place, in 1561, in a house in Maybole, now 'the Red Lion Inn.' It is needless to add that it ended, as is universally the case with such disputes, in a drawn battle, each party claiming the victory, and conceiving that he had demolished his antagonist.

MAYENNE, a dép. of France, reg. NW., formerly comprised in the prov. of Maine; between lat. 47° 45′ and 48° 34′ N., and long. 0° 5′ and 1° 20′ W., having N. Manche and Orne, E. Sarthe, S. Maine-et-Loire, and W. Ille-et-Vilaine. Length, N. to S., 55 m.; average breadth about 30 m. Area, 517,063 hectares. Pop. 375,168 in 1861. A mountain chain, though of no great height, bounds Mayenne to the N., from which two ranges strike off to the S., one forming the E., and the other a part of the W. boundary of the dép. It slopes gradually from N. to S., in which direction it is intersected near its centre by its principal river the Mayenne. The latter rises in the dép. of Orne, about 12 m. W. Alençon, running at first SW., and afterwards generally S., through the déps of Mayenne and Maine-et-Loire; in the last of which, after receiving the Sarthe and Loire, it assumes the name of the Maine, and falls into the Loire, after an entire course of nearly 130 m. (See also MAINE-ET-LOIRE.) Mayenne, Laval, Château-Gontier, and Angers are on its banks. There are numerous small lakes in this dép. It is estimated to comprise 354,298 hectares of arable land; 69,338 do. pasture; 26,379 do. woods; and 24,429 do. heaths and wastes. More corn is grown than is required for home consumption. The total produce is reckoned at upwards of 3,000,000 hectolitres, chiefly wheat, oats, and rye. The annual produce of cider is said to be about 600,000 hect. Some inferior wine is produced, but in small quantities only. Flax, hemp, chesnuts, and some other fruits, are the other principal products. Property is very much subdivided; and many of the farms, or rather patches called *closeries*, are so very small that they do not admit of the use of the plough, and are cultivated by the spade only. There are about 214,000 head of cattle and 144,000 sheep in the dép., the produce of wool being estimated at 175,000 kilogr. a year. The woods yield excellent timber, a good deal of which is appropriated to ship-building. Some extensive manufactures of linen stuffs and yarn were formerly established at Laval and Château-Gontier. But though these have fallen off, the linen and cotton fabrics, including printed handkerchiefs, of the dép., still enjoy a high reputation. The iron trade of Mayenne is of considerable importance, and it also furnishes superior paper. It is divided into three arronds.; chief towns, Laval the cap., Mayenne, and Château-Gontier.

MAYENNE, a town of France, in the above dép., cap. arrond., on both sides the Mayenne, 18 m. NNE. Laval. Pop. 10,370 in 1861. The town-proper stands on the right, or W., bank of the river; the portion on the opposite bank, though comprising a third of the entire pop., being only a suburb. They are connected by a bridge. This is an ill-built town; its streets are steep, irregular, and inconvenient, and its houses old and odd-looking.

Mayenne has a ruined castle, two par. churches, two hospitals, and a good town-hall, and manufactures of linen and cotton fabrics; the former of which has, however, greatly declined of late years, while the latter has increased.

MAYN, or MAIN, a river of Central Germany, which has its source in Bavaria. It is formed by the union, about 24 m. NW. Bayreuth, of the White and Red Mayn; the former rising in the Fitchtelberg, and the latter in the Frankenjura, about 8 m. SSE. Bayreuth. The resulting river flows, with a gentle current, generally W., but with a very tortuous course; first traversing the circles of Upper and Lower Franconia, in Bavaria, then dividing Hesse-Cassel and Nassau, on the N., from Hesse-Darmstadt, on the S., and intersecting the territory of Frankfort, till it ulti-

Digitized by Google

mately falls into the Rhine, nearly opposite Mentz, after an entire course of about 230 m. Though shallow, it is of equal depth, and is navigable throughout 7-8ths of its extent, as far as the confluence of the Regnitz, near Bamberg. The Mayn is of considerable importance as a means of traffic; and Frankfort, especially, owes all its consequence, as a commercial city, to this river. But few rivers, at least in civilised countries, presenting such facilities for improvement, have been more neglected; and, in addition to other inconveniences, the number and amount of the tolls levied on the Mayn oppose serious obstacles to its navigation. The Mayn forms part of the line connecting the Rhine and the Danube; a canal having been already commenced, which is to run from Dietfürth, on the Altmühl, to Bamberg, on the Regnitz. Besides the Regnitz, the Tauber, Mümling, and Gersprenz are its chief affluents from the S., and the Rodach, Saale, Kinzig, and Nidda from the N. Bayreuth, Bamberg, Wurtzburg, Aschaffenburg, Hanau, Offenbach, and Frankfort are either on, or immediately adjacent to, the banks of the Mayn.

MAYNOOTH, an inland town of Ireland, prov. Leinster, co. Kildare, on the Lyall Water, an affluent of the Liffey, 14 m. W. Dublin. Pop. 2,091 in 1861. The town is without trade, and depends principally for its support on the contiguous college. It has a par. church, a Rom. Cath. chapel, and the ruins of a large castle, once occupied by the family of Kildare.

The Royal College of St. Patrick, Maynooth, was founded in 1795, for the education of persons designed for the Roman Catholic ministry in Ireland. It is vested in a board of trustees, of whom the Roman Catholic archbishops are members *ex officio*, the remainder being selected from the Catholic hierarchy and nobility, in the proportion of seven of the former to six of the latter. The government of the college is administered by a board of visitors, partly chosen by election, and partly nominated by the crown, under the provisions of the act; but the powers of the visitors in general do not relate to or interfere with any matter having reference to the tenets, discipline, or authority of the Romish church. These important matters are entrusted to the care of the elected visitors, who must be members (and are usually dignitaries) of the Roman Catholic church. The chief functionaries of the establishment are the president, vice-president, and three deans; besides whom there are three professors of divinity, and seven others, giving instruction in various branches of literature and science. The number of students, on the first opening of the classes, in 1795, amounted only to 50; but it has since progressively increased to 450, to which it was limited, by the inadequacy of its funds to admit of further augmentation. But under the new regulations provision is made for 520 students. These are comprised, 250 in four junior classes, and 250 in three senior do., with a class of 20 superior students, who each derive, exclusive of other allowances, an income of 55*l.* a year from a fund left by a Lord Dunboyne for that purpose. The funds for defraying the expense of the establishment were derived, previously to 1845, from an annual parliamentary grant (usually of 8,928*l.*), and from bequests and fees. These, however, were quite insufficient for the proper support of an institution having to provide for the education of the Catholic clergy of Ireland. The salaries of the professors and the accommodations of the students were alike inadequate and paltry; while, despite this miserable economy, the institution was getting into debt, and the number of pupils was unequal to the wants of the priesthood. It is needless to say that the consequences of such a state of things were most prejudicial to the public interests; and to obviate these, and to place the institution on a footing more suitable to its important object, the annual parliamentary grant (of 8,928*l.*) was changed in 1845 to a permanent grant of 26,360*l.* a year, a sum of 10,000*l.* being, at the same time, voted for the repair and enlargement of the buildings and library. The trustees of the college have been also authorised to hold such land and other fixed property as may be left for its behoof, up to the value of 3,000*l.* a year.

In consequence of this liberal addition to its funds, the emoluments of the professors, and the education and accommodation of the pupils, have been materially improved. The students belong, with but few exceptions, to the middle and lower classes of Roman Catholic farmers and occupiers. Public examinations are held twice a year. The site of the establishment is a tract of 54 acres, adjoining the town; and the buildings, which form three sides of a quadrangle, comprise a chapel, refectory, library, lecture-rooms, dormitories, and professors' residences. The library contains about 10,000 vols., chiefly on theological subjects.

MAYO, a marit. co. of Ireland, prov. Connaught; of which it occupies the NW. portion; having N. and W. the Atlantic, E. Sligo and Roscommon, and S. Galway. Area, 1,355,048 acres; of which 425,124 are unimproved mountain and bog, and 57,940 water, consisting principally of Loughs Mask, Conn, and Carra. The coast-line is extremely irregular, from its being more deeply indented with bays and arms of the sea than any other part of Ireland. On the W. it is fenced with numerous islands, and it has several fine harbours, of which, however, very little use is made. It has every variety of surface, rising, in parts, into high mountains and rugged wastes; but comprising, also, a large extent of comparatively flat and fertile land. The substratum is generally limestone; and, from the thinness of the soil and the humidity and mildness of the climate, it is better suited for grazing than for tillage. Property in a few hands. There were formerly some very extensive grazing farms in this co., but their number and size have been very greatly diminished within the last half century. Land being here indispensable to existence, the competition for small patches is quite intense; and it is said that any amount of rent that may be asked is sure to be promised! It was formerly usual to let land on the village, or partnership, system; but of late years this practice has luckily been getting into disuse. Unfortunately, however, the *con-acre* system seems to be rapidly extending; and this is, if possible, worse than the other. If the ground is very rich it is usual, on this system, to begin by planting potatoes on the grass; but the far more common practice is to prepare for potatoes by paring and burning the surface and spreading out the ashes as manure. Hence, notwithstanding the increase of cultivation, the condition of the land, and of the great bulk of the occupiers of land, has deteriorated, and is as bad as possible. Average rent of land 6*s.* 1½*d.* per imp. acre; but the best grazing lands fetch above 40*s.* per Irish acre. Iron used to be made in this co.; the works have, however, been long abandoned, on account of the want of fuel. It has, also, some valuable slate quarries, but its mineral riches have been but very imperfectly explored. The linen manufacture, which had been pretty widely diffused, has materially declined, and its place has not been occupied by any other department of industry.

Digitized by Google

Principal rivers Moy, Guishden, Deal, Owenmore, and Robe. Principal towns, Castlebar, Ballina, and Westport. Mayo is divided into 9 baronies and 68 parishes. It sends 2 mems. to the H. of C., both for the co. Registered electors, 3,679 in 1865. At the census of 1861 the co. had 47,025 inhabited houses, 47,768 families, and 254,796 inhabitants, while, in 1841, Mayo had 68,425 inhab. houses, 70,910 families, and 388,887 inhabs.

MAZAMET, a town of France, dép. Tarn, cap. cant. on the Arnette, a tributary of the Tarn, 32 m. SSE. Albi. Pop. 10,924 in 1861. The pop. and prosperity of the town are increasing; it has some manufactures of woollen cloth; several dyeing establishments and paper mills, and considerable annual fairs for cattle.

MAZANDERAN, a prov. in the N. of Persia (an. a part of *Hyrcania*), separated from Irak-Adjemi by the lofty ridge of Elburg, and bounded N. by the Caspian Sea, E. by Khorassan, and W. by Ghilan. Length, from W. to E., 200 m.; average breadth, 50 m.; area, 10,000 sq. m. Pop. 150,000 (exclusive of the nomad tribes of Kadjars, Kodjavends, and Modanlus). The S. parts of the prov. are mountainous, abounding with oak-timber and full of swamps; but the valleys are fertile, producing the finest rice in vast quantities. Besides many smaller streams, the Mazanderan has two principal rivers, both having their sources in the Elburz mountains, and falling into the Caspian Sea. With respect to temperature the province may be divided into a warm and cold climate, the former being that of the flat country near the sea, and the latter that of the mountain region; in all parts, however, the climate is extremely variable with respect both to temperature and moisture. Winter and spring are the healthiest seasons; for during the summer and autumnal heats, such exhalations arise from the fens and marshes overspreading this part of Persia, as to render the air most insalubrious. Agues and dropsies, rheumatism and eye diseases, are the prevalent disorders, and the natives have generally a sallow and bloated appearance. Heavy rains fall in Oct., Nov., and Dec.: snow also falls, but never lies long on the ground; and in spring the rivers almost invariably overflow. The cultivation of rice is the most important branch of agriculture. Cotton and sugar, also, are raised; but the canes are small, and the produce is dark, moist, and of very inferior quality. Tobacco does not succeed, nor is opium much cultivated, though the poppy grows abundantly. Barley is sown occasionally in spring as a green crop for horses and cattle; it is cut about the middle of May, after which the ground is ploughed, and planted with rice. Wheat is little cultivated, and is of bad quality; but excellent flour is imported from Astrakhan. Unhusked rice is used as dry food for horses and mules. Silk was formerly raised only in small quantities, but it appears that, since the government monopoly ceased some few years ago, more attention has been paid to it, and its price has fallen. The trade of the prov. is chiefly with Russia in rice, silk, and cotton, which it exchanges for silk, cotton, and woollen fabrics, corn, tobacco, and cutlery.

The inhabs. are described as 'vain, ignorant, and arrogant, considering themselves as persons of mighty importance, superior to all strangers. Their ignorance of everything beyond their own prov. is profound to a degree hardly credible. Their bigotry in religious matters is excessive, though chiefly confined to forms; for there are few who do not transgress every article of inhibition: all of them drink strong liquors and eat opium.' In their appearance and dress they greatly resemble other Persians, but swarthy and almost black men are of more frequent occurrence than elsewhere. The natives are regarded as the most warlike of the Persians; and, in the time of Timour Bec, they defended their retreats and castles with so much courage and ability, as to secure their independence. This prov. is also said to have been the grand seat of the war between the Sefeed Deeve (or White Demon) and Rustom, prince of Zablestan; and the relief of his sovereign, who had been besieged in the city of Mazanderan, is one of the most glorious exploits recorded in the life of the Persian hero. The chief cities are Sari, Balfrosh, Ferrabad and Amul. Most of the towns and villages are open, well-built, and delightfully situated, either on verdant hills or in fertile and well-watered valleys. Among the numerous public works of Shah Abbas the Great is a magnificent causeway of great length, running nearly parallel to the Caspian. The pavement, even now, is perfect in many places, though it has hardly ever been repaired. In some places it is above 20 yds. wide, with ditches on each side; and on it are many bridges, under which the water is conveyed to the rice-fields.

MAZZARA (an. *Emporium* or *Massara*), a seaport town of Italy, island of Sicily, on its W. coast, intend. Trapani, cap. distr., on the Salemi (an. *Mazzara*), at its mouth, 11 m. SE. Marsala. Pop. 8,688 in 1862. The town is surrounded by an old wall of Saracenic construction, flanked by small square towers, and has an old ruinous castle at its SW. angle. The domes of its churches give Mazzara an imposing aspect from the sea; but the contrast, on entering the town, is no less striking. The streets are narrow, unpaved, filthy, and swarm with pigs: the public buildings, for civil purposes, are large, heavy, and mean; and those for ecclesiastical purposes, being very numerous, it has become a common saying, 'that every house in Mazzara has a priest and a pig;' the latter being by far the more useful animal of the two. The principal square has a singular appearance, from the antiquated style of its architecture; probably of the 11th century, from its having an equestrian statue of Count Roger destroying a Saracen, over the cathedral gate. Besides the cathedral, an edifice remarkable for its fine cupola, the principal buildings in this square are the bishop's palace, the senate-house, and the residence of Count Gazziri. In the cathedral porch are preserved three sarcophagi; the finest of them bears a bas-relief, representing the battle of the Amazons; the second, the rape of Proserpine; the third, and most inferior, the Calydon hunt. At the convent of St. Michael is a Roman tomb, and some marble inscriptions; these, with a small collection of Punic, Saracenic, and Roman coins, are nearly the sum of the antique remains.

Mazzara has a hospital, a college, and a theatre. Its port, which now, as in antiquity, is formed by the mouth of the river Salemi, is convenient enough for boats and small craft, but larger vessels are obliged to anchor in an exposed roadstead, in from 8 to 10 fathoms water. The entrance of the port is ornamented by a statue of St. Vitus, the tutelary saint of the town, in whose honour a festival is held here in August. Notwithstanding the badness of its port, Mazzara enjoys a considerable trade. It has a *carricatore* for the warehousing of corn, of which it exports considerable quantities; and it also exports pulse, wine, fruit, fish, barilla, madder, oil, and soap.

Mazzara, or Emporium, was taken by storm by Hannibal, previously to his commencing the siege of Selinus; but it does not appear to have been a place of much importance in antiquity. It was

Digitized by Google

here that the Saracens landed when they invaded and conquered Sicily.

An extraordinary phenomenon, called the *Marobea*, being a violent agitation of the sea, is witnessed on this part of the Sicilian coast. Its approach is announced by a stillness in the atmosphere and a lurid sky; when suddenly the water rises nearly 2 ft. above its usual level, and rushes into the creeks with amazing rapidity; but, in a few minutes, recedes again with equal velocity, disturbing the mud, and occasioning a noisome effluvia: during its continuance, the fish float quite helpless on the turbid surface, and are easily taken. These rapid changes generally continue from half an hour to upwards of two hours, and are succeeded by a breeze from the S., which quickly increases to heavy gusts.

MEATH, a marit. co. of Ireland, on its E. coast, prov. Leinster, having N. the cos. of Louth, Monaghan, and Cavan, W. Westmeath, S. King's Co. and Kildare, and E. Dublin and the Irish Sea. Area, 578,247 acres, of which only about 5,600 are unimproved or waste. Surface mostly flat, or only slightly undulating; soil, clay or loam, on limestone or gravel, and generally very fertile. Grazing used formerly to be the principal occupation; but of late tillage has been gradually extending, and is now spread over more than 4-5ths of the co. Notwithstanding the richness of the soil, and the favourable situation of Meath, the state of agriculture, and of the great bulk of the occupiers, are alike bad. A rotation of crops is only beginning to be introduced; corn frequently follows corn for a long series of years; when fallows do occur, they are in general wretchedly executed, so that the land is in general foul and in bad order. Latterly, however, a better system has begun to make its way into the co., and the stock and implements of husbandry have been a good deal ameliorated. Even the better sort of farmers are, for the most part, very badly lodged; and the cabins of the cottiers and labourers are in the last degree filthy and wretched. Potatoes constitute ¾ths of the food of the bulk of the people; oatmeal and churned milk are sometimes added, but they rarely taste butchers' meat, the pig being usually sold to assist in paying the rent. There are some large estates, but property is more divided than in most Irish cos. Tillage farms vary from 5 to 50, and some few extend to 100 acres. Average rent of land, 18*s.* an acre, which is higher than that of any other Irish co., except Dublin. Minerals and manufactures of no importance. Irish language pretty generally spoken. Principal river, the Boyne. Principal towns, Navan and Kells. Meath is divided into 12 baronies and 147 pars. At the census of 1861, the co. had 21,674 inhabited houses, 21,908 families, and 110,373 inhabitants, while in 1831 it had 29,796 inhab. houses, 31,632 families, and 176,826 inhab.

MEAUX (an. *Jatinum*, afterwards *Meldi*), a town of France, dép. Seine-et-Marne, cap. arrond., on both sides the Marne, 24 m. ENE. Paris, on the railway from Paris to Strasbourg. Pop. 10,762 in 1861. The town is pleasantly situated, and is tolerably well built. Its ramparts have been laid out in public walks, and it has some good promenades along the river, and a spacious public square. The cathedral, one of the most remarkable Gothic edifices in France, was begun in 1282, but not finished till the 16th century: it is 328 ft. in length, 137 ft. in breadth; the height of its vault being 150 ft., and that of its tower 213 ft. Its choir and sanctuary are extremely elegant, but it derives its chief interest from its containing the remains and monument of Bossuet; who, having been raised to the bishopric of Meaux in 1681, continued in possession of the see till his death, in 1704. The controversial writings of this celebrated divine of the Gallican church display extraordinary learning and acuteness; but it is to his *Discours sur l'Histoire Universelle*, and his *Oraisons Funèbres*, that he is mainly indebted for his imperishable renown. Exclusive of the cathedral, the public buildings comprise the episcopal palace, in which is the writing-table of Bossuet, a public library, with 14,000 vols., the college, town-hall, theatre, two asylums, a Protestant and two par. churches, and cavalry barracks. Meaux has manufactures of cotton stuffs, earthenware, and glue. Numerous flour mills are constructed on the Marne, the produce of which is sent to Paris, and the town has a good deal of trade in this and other articles of farm produce: its traffic is greatly facilitated by the canals of Ourcy and Cornillon. Meaux is very ancient: it was made a bishopric in 375; was twice sacked by the Normans in the 9th century; and was annexed to the French crown by Philippe-le-Bel. The French Protestants first preached publicly in this town, and it was the first to abandon the league, and submit to Henry IV.

MECCA, one of the most famous cities of the eastern world, the birthplace of Mohammed, and the great centre of attraction to all the pilgrims or *hadjis* of the Mohammedan faith in Arabia, prov. El-Hedjaz, 51 m. E. from the port of Djidda (which see), on the Red Sea, and 270 m. S. by E. Medina; lat. 21° 28′ 17″ N., long. 40° 15′ E. Pop. estimated at 25,000. This celebrated city is forbidden ground to Christians, and formerly was known to Europeans only through indirect and suspicious information from Mohammedans or African renegades. It was for the first time visited, in disguise, by Burckhardt; who has given a very full description of the localities, climate, inhabitants, government, religious ceremonies, and pilgrim visitors, not only of this city, but also of Medina. Mecca (literally meaning 'the place of assembly,' but pompously entitled by the Arabs *Om-el-Kora*, 'mother of towns,' and *Beled-al-Ameyn*, 'region of the faithful,') stands in a long, narrow, barren, sandy valley, running N. and S., called in the Koran 'the valley without seeds.' It is a straggling town, nearly 2 m. in length, but nowhere more than about 600 paces in breadth; the streets, which are irregular, unpaved, and dusty, are generally wider than those of other eastern cities. The handsomest entrance is from Djidda, the SW. quarters comprising some of the best houses; but on the other side of the great mosque, which is the nucleus of Mecca, there are three or four other good streets; the best of which, perhaps, is the Mesaa, the great resort of the Turkish pilgrims, and the noisiest, as well as most frequented part of the town. 'Indeed,' says Burckhardt, 'the Mesaa resembles a Constantinopolitan bazaar. Many shops are kept by Turks from Europe and Asia Minor, for the sale of swords, watches, copies of the Koran, and second-hand Turkish dresses; and there are numerous vendors of pies, sweetmeats, &c. Here, too, are numerous coffee-houses, crowded during the Hadj from three in the morning till eleven at night; barbers' shops, auction rooms, &c. W. of the Mesaa branches off a street called Soucyga, or the Little Market, which, though narrow, is the neatest street in Mecca, being regularly cleaned and sprinkled with water. Here the rich India merchants offer for sale their piece-goods, Cashmere shawls, muslins, perfumes, Mecca balsam, aloe-wood, civet, &c., strings of coral, necklaces of carnelian, seal-rings, and various kinds of China ware, and Abyssinian slaves. In fact, the Soucyga, being the coolest spot in the town during mid-day, is on that

Digitized by Google

account the most frequented; and here all the gentlemen-*hadjis* take their morning and evening lounge, smoke their pipes, and hear or tell the news.' (Burckhardt's Arabia, i. 212–219.)

The quarter called Shamye is likewise well built, being chiefly inhabited by merchants or *olemas* (clergy) attached to the mosque, and frequented at the pilgrim time by merchants from Damascus; in whose shops are found silks, cambrics, gold and silver thread, handkerchiefs, carpets, dried fruits, and pistachios. Near those last-mentioned, also, is another respectably-built quarter, called Garara, inhabited by some of the wealthiest native merchants. These are certainly the best parts of the town, comprising lofty stone houses, often 3 stories high, surmounted by handsome terraces, and (what is unusual in eastern towns) having rows of windows fronting the streets. The town, however, is not lighted, is scantily supplied with water, and contains many quarters, which, in filth and closeness, might vie with the dirtiest parts of Constantinople. Though once walled on 3 sides, Mecca is at present entirely open; but the neighbouring mountains are sufficiently high to form a tolerably strong barrier against an enemy; and on the rising ground S. of the city stands the great castle, a massive square structure, with thick walls and solid towers, comprising a bomb-proof magazine, a reservoir for water, and accommodation for 1,000 men. With this exception, Mecca may be said to be almost destitute of public buildings; for the houses belonging to the sheriffs, though handsome, are merely private, and not large dwellings, and the *medresses*, or colleges, are now converted either into store-houses or lodgings for pilgrims. This circumstance is, no doubt, attributable to the veneration of the people for their holy house, and this feeling prevents them from erecting any structure which might seem to rival the great object of their affection.

The *Beitullah*, otherwise called *El Haram*, the chief glory of Mecca, and the resort of every pious Mussulman who regards the injunction of the Koran, is a building by no means remarkable either for size or beauty; standing on low ground in an oblong enclosure about 350 ft. in length and 300 ft. in breadth, formed by colonnades, roofed with numerous small plastered cupolas, supported by 450 pillars, about 20 ft. in height, of marble or Mecca stone. The temple has been so often ruined and repaired, that it has no traces of remote antiquity. The walls, arches, and minarets at the angles of the building are gaudily painted in stripes of yellow, red, and blue; but paintings of flowers in the usual Mussulman style are nowhere seen, and the colonnades are very clumsily paved. The Kaaba, or Holy House, which occupies the centre of the enclosure, and is the great attraction for all pilgrims, lays claim to a far more remote origin than that of Mohammedanism; and, though sceptics may doubt the alleged fact of its having been built by Abraham and Ishmael, assisted by the angel Gabriel, there can be no question that its genuine antiquity ascends beyond the Christian æra. In all probability, the Kaaba is alluded to by Diodorus Siculus, when speaking of a temple held in superior sanctity by *all* Arabians. In the second century Maximus Tyrius attributes to the Arabs the worship of a stone; and this, if not identical with, is, at any rate, analogous to the 'black stone' of Mecca, which, as Gibbon justly remarks, is deeply tainted with the reproach of an idolatrous origin. (Gibbon, ix. 247.) The Kaaba, which was all but rebuilt in 1627, after having suffered great damage from fire, is an oblong massive structure, 18 paces in length, 14 do. in breadth, and from 35 to 40 ft. in height, its door being coated with silver, and embellished with gold ornaments. At the NE. corner, near the door, is the 'Black Stone' previously alluded to, obligingly brought by the angel Gabriel as his contribution to the building: it forms part of the sharp angle of the structure, 4 or 5 ft. above the ground; being oval-shaped, 7 inches in diameter, of a dark brown colour, somewhat resembling lava, and surrounded by a border of cement and silver, to prevent its being worn away by the kisses and touches of the pilgrims. Round the building is a broad marble pavement; and at the SE. corner is another stone, much revered by all visitors, but of a less noble origin, and less holy than the other. The 4 sides of the Kaaba are covered with a curtain of embroidered black silk stuff, called the *kesona*, annually brought from Cairo at the time of the Hadj, and renewed with some not very decorous ceremonies. The holy fountain of Zem-zem, (said to be that so opportunely found by Hagar, when her son Ishmael was dying of thirst,) which supplies the town with water for *drinking* or *ablution* (its use for other purposes being forbidden), is enclosed in a substantial square building, having a handsome marble-faced entrance, with marble basins for ablution, and a room appropriated to the pilgrims, who come here in crowds to taste the miraculous fountain. From before dawn till near midnight, the well-room is constantly filled with visitors; all of whom, if not disposed to buy the services of the attendant, may themselves draw freely from the well. Various stories are afloat respecting the origin and virtues of this sacred spring, which, of course, are all believed by orthodox visitors, few of whom leave Mecca without carrying away some of the water in copper or tin bottles, to give away to their friends, and for their own use during illness, and their ablution after death. These are the chief buildings within the enclosure, but none of them can be considered as consecrated, except during the hour of prayer; for, at other times, barbers, and all kinds of retail vendors, porters, and idlers, are to be met with at every turn. (Burckhardt, vol. i. p. 278.) In several parts of the colonnade, public schools are held for the instruction of young children; while, in other parts, a few professors deliver theological lectures, which meet, however, with little patronage from the pilgrims, who, with all their anxiety to visit the holy house, are, like all Turks, too much attached to the *dolce far niente* to trouble themselves with the doctrines either of theologians or men of science. The exterior of the mosque is adorned with seven quadrangular minarets, from the summits of which a view is obtained of the busy scene around. There are 19 gates, distributed without any order or symmetry; and the outside walls are formed by the surrounding houses, which during the pilgrimage are let, at enormous rents, to the wealthiest hadjis, with whom it is a grand object to be as near as possible to the holy house. The windows of these houses overlook the enclosure; and hence their occupiers are enabled to join in many of the mosque services without stirring from home. The service of the mosque occupies a vast number of people, as the Imâms, Muftis, officers of the Zem-zem, Mueddins, Olemas, lamplighters, and menial servants, all of whom receive regular pay, besides sharing the presents made by the pilgrims. The revenues of the mosque were formerly very extensive; but its wealth has greatly declined, nor does it now possess any treasures except a few golden lamps, the establishment being kept up almost wholly at the expense of the sultan. The first officer of

Digitized by Google

the mosque is the *Nayb el Haram*, or warden, who keeps the keys of the Kaaba, receives the pilgrims' contributions, and directs the repairs of the building. Next to him is the Aga of the eunuchs, a body of about 40 negroes, who perform the duty of police officers in the temple, preventing disorders, and washing and sweeping the pavement round the Kaaba. In the time of the Ramadan, or great festival, the mosque is particularly brilliant; not only from the number of pilgrims of every age, rank, and nation within the enclosure, but also from the thousands of lamps which illuminate the colonnades. On the termination of the Hadj, however, the temple assumes a very different appearance. Disease and mortality, caused by fatigue, unhealthy lodgings, bad fare, and, in some cases, by absolute destitution, fill the mosque with the sick and dying; all of whom are anxious to have the satisfaction of expiring in view of the Kaaba, of receiving the Imâm's prayers, and of being sprinkled with the sacred water of Zem-zem. Whoever enters Mecca, whether pilgrim or not, is enjoined by the law to visit the temple immediately, and not to attend to any worldly concern before he has discharged that solemn duty. Certain religious rites, such as walking seven times round the Kaaba, and reciting certain prayers, are performed in the interior of the mosque; then comes the ceremony of walking seven times between the hill of Szafa and Merona; and, lastly, the pilgrims must submit to have their heads shaved by the barbers of the mosque. All these ceremonies must be repeated by every Mussulman, who enters Mecca from a journey farther than two days' distance; and they must be again more particularly performed at the time of the pilgrimage to Arafat, a hill about 15 m. E. of Mecca, to which Mohammed used to retire to pray, and which, on this account, is esteemed particularly sacred by all Mohammedans.

The concourse of pilgrims to the holy mount is often immense. Burckhardt says he counted about 3,000 tents dispersed over the surrounding plain; but the greater number of the pilgrims were without tents: between 20,000 and 25,000 camels were to be seen scattered among the pilgrims, whose numbers, he concludes, must have exceeded 70,000. The camp was from 3 to 4 m. long, and between 1 and 2 m. in breadth. But we suspect that these returns are very decidedly beyond the mark, and the taste for pilgrimages is now rapidly declining throughout the Mohammedan world. A visit to Arafat is indispensable to the pilgrims; none by any chance omit it; nor can the title of Hadji be assumed except by those who have been present at the ceremony. Mecca, like Jerusalem, boasts of many places rendered sacred by tradition. The birthplaces of Mohammed and his daughter Fatima, the tomb of his wife Hadija, and the cell where the Prophet wrote the Koran, are shown to the pilgrims, who are expected to make contributions for their maintenance. But a visit to these places forms no item of religious duty; and but few depart in any way from the prescribed routine, as such acts would interfere with their profits either as merchants or beggars, and thus frustrate a very important, if not chief, object of the expedition.

The inhab. of Mecca are, with the exception of a few Hedjaz Bedouins, either foreigners or the offspring of foreigners. The ancient tribe of Koreysh, to which Mohammed belonged, is almost extinct; and there are now in Mecca only three or four Koreysh families, the head of one of which is the Nayb, or keeper of the great mosque. The neighbourhood, however, of the great mart of Djidda, the annual arrival of immense caravans, and the holy house, attract thither vast multitudes of strangers; a portion of whom remain behind, and settle permanently in the city, adopting Arabian habits, and intermarrying with the native pop. The most numerous are the descendants of Arabs from Yemen and Hadramaut; next to them in numbers are those of Hindoo, Egyptian, Syrian, African, and Turkish origin; besides whom there are Persians, Affghans, Kurds, and people, in short, of almost every Mohammedan nation, all of whom are careful in preserving a traditional knowledge of their original country. The inhab., however, though differing so much, nationally considered, wear the same sort of dress, have the same customs, and care much less for national costume and manners than in any other part of the East. Their colour is a yellowish brown, and in features they closely resemble the Bedouins: the lower classes are generally stout, with muscular limbs, while the higher orders are distinguished by their meagre emaciated forms and black piercing eyes. All classes are fond of dress, and the earnings of the poor are mostly spent on clothes. The women wear Indian silk gowns, with large blue striped trousers reaching to the ancles, and a white kind of hood to cover the face. There are few families in moderate circumstances that do not keep slaves, most of whom are Nubians and Abyssinians, brought thither from the port of Suakim: many African females are kept as concubines; and, in case of their having issue, the masters usually legitimate the offspring by marrying them. The sale of concubines is confined to the middle and lower classes, the more wealthy regarding the practice as disgraceful. The inhab. of Mecca, as also of Djidda and Medina, are far more lively and communicative than either the Syrians or Egyptians, and in this respect they resemble the Bedouins. Indeed, vivacity of temper, acute intellect, sagacity, and sauvity of manner, are characteristics of almost all the native inhab.; while, at the same time, their proud, independent spirit, for which they are equally remarkable, is infinitely preferable to the cringing servility of the Turks of Anatolia and Syria. Religion exercises little control over them; and, though they are proud of aping the manners recorded of Mohammed, and thoroughly versed in the Koran, few Mussulmen are so inattentive to the moral duties inculcated by the Prophet. For the most part, indeed, they exhibit great profligacy of character. Drunkenness, gambling, cheating, false-swearing, and the grossest sensuality, are of every-day occurrence; and it is a common saying among the people, 'Forbidden things abound in the city forbidden to infidels.' Learning and science, which once flourished in Mecca, are now almost wholly neglected. The many *medresses*, or colleges, for which the city was formerly renowned, are turned either into corn-magazines or lodging-houses for pilgrims; its large libraries have disappeared; the great mosque is at present the only place where teachers of eastern learning are to be found; and the Mecca-ways themselves, who wish to improve in science, go to Damascus or Cairo,

The employments of the people are in trade and the service of the Beitullah, but there are few employed in the mosque who do not, clandestinely at least, engage in commercial affairs. There are but few artisans, and these much inferior in skill to the same class in Egypt; a few potteries and dye-works are the only manufactories, and the town is wholly dependent on other countries for its necessary supplies. Hence there is a large foreign trade, and the holy city is crowded, during

Digitized by Google

the month of Dhalhajja (the latter end of June and beginning of July), not only with zealous devotees, but opulent merchants, who thus make use of the permission granted them by the Prophet: 'It shall be no crime in you, if ye seek an increase from your Lord *by trading during the pilgrimage*.' (Sale's Koran, ch. ii.) During the whole twelve days that the pilgrims are allowed to remain, a fair or market is held in Mecca and its vicinity; and though the number of pilgrims has greatly declined of late years, it is still a crowded and bustling scene. 'Few pilgrims,' says Burckhardt, 'except the mendicants (a very numerous class), arrive without bringing some productions of their respective countries for sale; and this remark is applicable as well to the merchants, with whom commercial pursuits are the main object, as to those who are actuated by religious zeal; for to the latter the profits derived from selling a few articles at Mecca diminish in some degree the heavy expenses of the journey. The Mogrebyns (pilgrims from Morocco and N. Africa) bring their red bonnets and woollen cloaks; the European Turks, shoes and slippers, hardware, embroidered stuffs, sweetmeats, amber, and trinkets; the Turks of Anatolia bring carpets, silks, and Angora shawls; the Persians, Cashmere shawls and large silk handkerchiefs; the Affghans, tooth-brushes made of the spongy boughs of a tree growing in Bokhara, beads of yellow soap-stone, and plain coarse shawls manufactured in their own country; the Indians furnish the numerous productions of their rich and extensive region; the people of Yemen, snakes for Persian pipes, sandals, and various other works in leather; and the Africans bring various articles adapted to the slave trade. The pilgrims are, however, frequently disappointed in their expectation of gain, for want of money often obliges them to accept very low prices.' The most respectable of the mendicant pilgrims are negroes (called here *Tekrourys*), and these apply themselves to labour immediately on their arrival at Mecca: some serve as porters, for the transport of goods and corn from the ships to the warehouses; some hire themselves to clean the court-yards, fetch wood, and carry water; while others manufacture small baskets and mats of date leaves, or prepare the intoxicating drink called *bouza*. The pilgrims are accommodated in lodgings, for which the inhab. charge a most exorbitant rent; and all, except those of the highest and lowest ranks, live together in a state of freedom and equality, keeping but few servants, and generally dividing among themselves the various duties of housekeeping. The two principal caravans which rendezvous at Mecca are those of Damascus and Cairo; both of which always arrive at fixed periods, generally a day or two before the departure of the Hadj for Arafat. The former of these is very large, and is, at the same time, very well regulated. The caravan of Cairo is much smaller, and its route, along the Red Sea, is more dangerous and fatiguing; but many of the Egyptian and African merchants now come by sea from Suez, Cosseir, and Suakin to Djidda, and thus avoid the weariness of a long land journey. The Persian caravan sets out from Bagdad, and crosses the desert; but it is now of little importance, as all but the poorest Persian pilgrims come round by sea from Bussorah, between which place and Djidda there is a large and steadily increasing trade.

The climate of Mecca is sultry and unwholesome; especially in August, Sept., and Oct., when a hot suffocating wind prevails. The wet season is in Dec., but the rains are not so continuous as in other tropical countries. Intermittent and inflammatory fevers, dysentery, elephantiasis, and stone are common diseases; and, with respect to the general health of the town, Burckhardt says, 'I seldom enjoyed perfect health while in Mecca: I was twice attacked by fever, attributable chiefly to bad water; and, even on those days when I was free from disease, I felt great lassitude, depression of spirits, and total want of appetite.' (Vol. i. p. 450.)

The territories of Mecca, Tayf, Gonfade, and Yembo were, previously to the Wahabee and Egyptian conquests, under the command of the sherif of Mecca, who held his authority from the grand seignior; but when the Porte was no longer able to send large armies with the Hadj caravans to secure her power in the Hedjaz, the sherifs became independent. The Wahabees (who are to the Mohammedan religion what the Protestant churches are to Christianity) took possession of Mecca in 1802, and retained it till 1813, when Mehemet Ali restored the holy cities to the nominal protection of the Porte, while at the same time he placed them effectually under his own control.

MECHLIN (Fr. *Malines*), a city of Belgium, prov. Antwerp, cap. arrond., on the Dyle, a tributary of the Scheldt, and on the railway between Antwerp and Brussels, 14 m. SSE. the former, and 14 m. NNE. the latter. Pop. 33,521 in 1860. The Dyle divides Mechlin into two parts. It is regularly laid out with broad, well-paved, and clean streets. Houses grotesque, antiquated, and frequently of a large size; but, being painted in front, they look clean and cheerful. The fortifications were demolished by the French in 1804. The most remarkable public building is the cathedral, a Gothic edifice, commenced in the 12th century. The body of this building is by no means commensurate with the present altitude of the morisco tower attached to it, and still less with the height to which it was originally intended to be carried. This massive tower, with its truncated steeple, begun in 1452, is 370 ft. above ground, being the height of the cross of St. Paul's, London; and, had it been completed according to the original design, it would have been 640 ft. high. The Last Supper, the altar-piece, is by Rubens: the heads of the apostles and style of drapery are said to be in his best manner; but the Christ is a failure, and the picture is mildewed. The church of the Récollects has the famous picture of the Crucifixion, by Vandyke. 'This,' says Sir Joshua Reynolds, 'is perhaps the most capital of all his works, in respect of the variety and extensiveness of the design, and the judicious disposition of the whole. It may be considered as one of the first pictures in the world, and gives the highest idea of Vandyke's powers.' (Reynolds's Works, ii. 273, ed. 1819.) There are pictures by Rubens in the cathedral, and some of the other churches, of which the Adoration of the Magi, in the church of St. John, is, probably, the best. After the churches, the bishop's palace, town-hall, arsenal and cannon foundry, the Franciscan convent, and the *Béguinage*, a large asylum for 800 widows, or aged women, are the principal public buildings. Mechlin is the see of an archbishop, who is primate of Belgium, and has a revenue of about 4,000*l.* a year. It is the seat of a tribunal of primary jurisdiction, and the residence of a military commandant. It has an ecclesiastical seminary, a college, an academy of painting, a society of the fine arts, and a *mont-de-piété*. It has been long celebrated for the manufacture of lace, of a coarser and stouter kind than that of Brussels; but this has latterly been to a considerable extent superseded by the Nottingham lace, and but few houses are now engaged in

Digitized by Google

the business. Among its other fabrics are those of Cashmere shawls and gilt leather chairs: the latter were at one time an article of export, and upwards of 400 workmen are still engaged in their manufacture.

Mechlin furnishes a peculiar species of beer, of a light body, which acquires, by keeping, a vinous flavour and quality. Another delicacy peculiar to this city, is the '*Déjeûner de Malines*,' a dish much admired by travellers as well as natives, into which pigs' feet and ears enter as important constituents.

Mechlin has an extensive trade in flax, corn, and oil. The tide ascends the Dyle to a league above the city, which is accessible for vessels of considerable burden from the Scheldt. Mechlin is connected with Louvain by a canal navigable by vessels of 160 tons. The town forms also the central station of the Belgian railways.

As early as the 6th century, Mechlin appears to have been a place of importance, and the cap. of a lordship. It suffered severely from war, plague, and fire in the middle ages; and in modern times has been repeatedly taken by the Spaniards, Dutch, English, and French.

MECKLENBURG, a territory in N. Germany, between lat. 53° and 54° 20′ N., and long. 10° 35′ and 13° 57′ E.; having N. the Baltic, E. and S. the Prussian dom., and W. Hanover, Denmark, and Lubeck. Area, 5,820 sq. m. Pop. 647,509 in 1860 Mecklenburg is divided into

1. MECKLENBURG-SCHWERIN (GRAND DUCHY OF), a state of N. Germany, between lat. 53° 7′ and 54° 20′ N., and long. 10° 37′ and 13° 15′ E.; having E. Pomerania and Mecklenburg-Strelitz, S. the province of Brandenburg, W. the territories of Luneburg and Lauenburg, the principality of Ratzeburg, belonging to M.-Strelitz, and the territory of Lubeck, and N. the Baltic. Length, E. to W. about 110 m.; average breadth nearly 45 m. Area, 4,833 sq. m. Pop. 548,449 in 1861. Mecklenburg belongs to the great plain of N. Germany; it is not, however, a dead level, but has an undulating surface, interspersed with some ranges of low hills, one of which, the Ruhneberg, rises to nearly 600 ft. above the level of the Baltic. It has several rivers of some size, as the Recknitz, constituting its NE. boundary, the Warnow, and the Stepnitz, flowing to the Baltic, the Elde, a tributary of the Elbe, and others; and a great number of lakes, that of Müritz, which has an area of more than 50 sq. m., and is elevated 216 Rhenish ft. above the sea, being by far the largest lake in N. Germany; next to it is the lake of Schwerin, having the cap. of the duchy on its banks. Notwithstanding its high lat., this grand duchy has a milder climate than most parts of Germany. The mean temp. of Germany is 51° Fahr. (8° 5′ R.), that of Mecklenburg 52° 5′ F. (9° R.) But the winter is severe, the average temp. of that season being little above the freezing-point; the atmosphere, also, is particularly humid, which, added to the moisture of the soil, renders catarrhs and consumptions frequent. The surface and soil are various. On either border of the principal range of hills a poor sandy tract extends, covered with heath; and few parts of Germany are worse cultivated, or more thinly inhabited, than that between Schwerin and Güstrow, a distance of nearly 40 m. To the S. of this district the soil is somewhat better; and beyond Güstrow, towards what was formerly Swedish Pomerania, the sand gradually changes into a fertile loam, well adapted to the growth of rye and wheat. Near the Baltic the soil is, for the most part, a meagre sand, intermixed with stripes of loam. With the exception of the sandy heaths, the face of the country is cheerful and pleasing; the land is mostly enclosed; the woods, which are extensive, are scattered over the country, and on the borders of the lakes good meadow lands occasionally present themselves. Mecklenburg is essentially an agricultural country. It is generally divided into large estates. The demesnes of the sovereign comprise 4-10ths of the land, and those of the nobility, knights, and *Ritter*, nearly 5-10ths; leaving about 1-10th in the possession of the municipalities and a few monastic institutions. Farms are generally very extensive; they vary from 300 to 1,000 or 1,200 acres. About one-fourth part of the prov. is cultivated by proprietors resident on their own estates, and who are frequently very intelligent and well-informed; about a half is occupied by farmers, and a quarter by peasants or *Bauern*. The severity of the winter makes it necessary to have farm buildings sufficient to accommodate the live-stock, in addition to the corn and hay; and hence a gentleman's house has near it, besides labourers' cottages, more than five times the extent of barns, stables, cow and sheep houses, that would be required in England for the same extent of land. Farms, when let, are usually held by tenants on leases, varying from 7 to 21 years. The rent varies, of course, according to the quality of the soil, and situation. It is almost uniformly paid in money, and the rotation of crops prescribed in the lease must be strictly adhered to. Taxes are lower than in most parts of the Continent. The various taxes and other out-goings borne by the proprietor may be estimated at about 1*d.* an acre. The stock on the larger farms usually belongs to the tenants; but that on the smaller farms, held by peasants, usually belongs to the landlords.

The cultivation of wheat (especially the red variety) has increased greatly of late years, and Mecklenburg is now one of the principal countries of Germany for the export of wheat. Rostock wheat is, however, inferior to either English or Dantzic wheat; so much so, that when wheat is being shipped from Rostock at 18*s.* a quarter, it will fetch 27*s.* or 28*s.* at Dantzic. Next to corn, peas, beans, potatoes, and turnips are principally grown. Hemp and flax are reared, but in no great quantities; and the culture of tobacco has very much diminished. Of late years horses, instead of oxen, have been employed in field labour. The system of cultivation corresponds with that of Holstein and Schleswig. After a year's fallow three corn crops, usually rye, barley, and oats, are taken in succession, the land being sown down with grass seeds; along with the 3d corn crop, a crop of hay is taken in the 5th year, and the 6th and 7th years the fields are in pasture. The climate is too cold for the vine, though latterly it has been raised to some extent at Crevitz, and some bad wine has been produced. The horses and horned cattle, which are both numerous and excellent, find a ready sale in every part of Germany, and are a source of great profit to the landed proprietors. The breed of horses has been much improved, by means of the grand ducal and private studs. Sheep have been a good deal increased of late: the stock in the grand duchy is now estimated at about 1,300,000, and wool has become a principal article of export. Herds of hogs and flocks of geese are met with in every part of Mecklenburg. The former wander, nearly wild, through the forests, feeding on acorns and roots, and the geese literally cover the banks of the lakes and rivers. The latter supply a considerable part of Europe with quills; and their breasts, smoked and cured like bacon, are much esteemed as a delicacy.

Digitized by Google

The pop. has in recent years been decreasing, chiefly in consequence of emigration, which, in the years 1850-60, carried off between 7,000 and 8,000 persons per annum. Till within the last 50 years the peasants were in a state of mitigated slavery. They could acquire, enjoy, and transmit property, but they were *adscripti glebæ*, and bound to the soil, so as to be sold or let with it. The government took measures, on the restoration of peace, to abolish this relic of the feudal ages; and, about 1820, all the peasants who still remained in the condition of serfs (for many of the proprietors had previously emancipated those on their estates), were declared free, though their actual manumission did not take place till the year 1825. They are now, however, quite free, and may labour where and under whatever conditions they please to stipulate with their employers. Previously to the emancipation of the peasantry, a man was estimated to cost during harvest 1*s.* 4*d.*, during haymaking 1*s.* 1*d.*, and at other periods from 6*d.* to 1*s.* a day. But few changes have since taken place, either in the condition or appearance of the peasantry. The country, at a passing view, seems, from the magnitude of the farm buildings, and the number of enclosures and woods, to be more prosperous than, on a closer examination, is found to be the case.

In Mecklenburg the general principle is, that every place shall provide for its own poor, either separately or in common with others. All proprietors are bound to maintain the poor on their estates; and, in furtherance of that object, are entitled to levy a sum of about 8*d.* a year from the day labourers, and 4*d.* from the maidservants on the estate, though but few avail themselves of this privilege. When crown lands are let there is always a clause in the contract, regulating what the farmer, the dairy farmer, the smith, and the shepherd are to pay for behoof of the poor. The higher classes, public officers, and merchants pay 1 per cent. of their income to the poor's funds. All poor persons have a legal claim to assistance, and, if necessary, such work must be found them as they can perform.

About 80,000 cwts. of salt are obtained annually; but, with the exception of lime, minerals are of little importance, and mining is quite neglected. Manufactures are not very considerable. The principal are those of woollen and linen fabrics; but in both the produce is chiefly for home consumption. Mecklenburg is famous, even in Germany, for the distillation of corn spirits. Every one may carry on the business of distiller, without tax or restriction of any kind; and this facility has, no doubt, tended to increase that taste for ardent spirits which, unhappily, distinguishes the peasantry. A few cotton, paper, glass, tobacco, soap, and wax-light factories, with breweries and tanneries, complete the list of manufacturing establishments. The government is, however, devoting a good deal of attention to the improvement and diffusion of manufactures, and at least one school of arts and trades is now established in every town. Mecklenburg has an extensive trade in farm produce, which is facilitated by the proximity of the Elbe and the Baltic, especially the former, the principal part of the foreign commerce of the duchy being carried on through Hamburg. The value of the exports amounted to 1,146,000*l.* in 1862, of which corn for 500,000*l.*, wool for 170,000*l.*, and horses for 104,000*l.* The commercial policy of Mecklenburg is as liberal as can be desired: there are no duties on imports, except a trifling excise at her ports, nor any frontier dues beyond a trifle in the shape of a road-toll, which does not, however, appear to be strictly enforced. The only commercial towns and ports of consequence are Rostock and Wismar. The other towns have merely a retail trade, a large part of which is in the hands of Jews. In the S., Prussian money and measures are current; but the Hamburg measures of length and the Lübeck measures of capacity, are in use, in most parts of the grand duchy. The Mecklenburg rod is larger than the Rhenish, in the proportion of 1 to ·809; the *morgen* varies from 200 to 400 sq. rods. The pound is to that of Hamburg as 401 to 400: the centner = 8 liespfund = 112 lbs.; but in Rostock the liesp. has 16 lbs.

The government of M.-Schwerin is intimately connected with that of M.-Strelitz. Each grand duchy has its separate states, which, also, meet separately; but the states of both grand duchies assemble once a year, alternately at Sternberg and Malchin. The joint assembly has the right, in conjunction with the grand duke of Mecklenburg-Schwerin, to make laws for and impose taxes on the whole of Mecklenburg; it consists of the landed proprietors among the nobility, and of deputies from towns, in all amounting to between 500 and 600 members. When the states are not assembled a committee sits at Rostock. The executive power is entrusted to a *directorium*, consisting of 8 grand-ducal councillors, 3 heads of noble families (*Erb-Landmarschalle*), and a deputy from the town of Rostock, which is itself a sort of little republic, or *imperium in imperio*. The grand duchy is divided into 5 principal districts—the duchy of Schwerin, or circ. of Mecklenburg; the duchy of Güstrow, or circ. of Wenden; the district of Rostock; the principality of Schwerin, and the lordship of Wismar; besides which there is a small extent of territory, which sends no representatives to the states, and over which 3 conventual establishments have jurisdiction.

Justice is administered in primary courts in the towns and villages, in patrimonial courts on the estates of the nobility, with courts of secondary jurisdiction at Schwerin, Güstrow, and Rostock, and a high court of appeal at Parchim, which is the supreme legal tribunal for both grand duchies. With the exception of between 3,000 and 4,000 Jews, the inhab. are nearly all Lutherans. There are upwards of 1,000 primary schools, about 40 superior public schools (*Bürgerschulen*), 5 gymnasia, and the university of Rostock, with several ecclesiastical and other special seminaries. Previously to 1826, there was but one bookselling establishment in the grand duchy; but, since that period, the diffusion of education and the cultivation of literature has led to the establishment of numerous others.

The public revenues of the grand duchy amount to 510,000*l.* per annum, and the public debt was 1,468,790*l.* in 1862. The dukes of Mecklenburg had formerly 5 votes in the college of princes, in the diet of the empire. Since 1815, Mecklenburg-Schwerin has held, with Mecklenburg-Strelitz, the 14th rank in the Germanic Confederation. They have conjointly 2 votes in the general assemblies, but only one in the committee of the diet. Mecklenburg-Schwerin furnishes a contingent of 5,967 men to the army of the Confederation.

Schwerin is the political cap.; but Ludwigslust, a town with a pop of about 5,000, 14 m. SW. Parchim, is the usual summer residence of the grand duke. The palace, which is a fine large edifice, has a cabinet of pictures and a collection of Slavonic antiquities; the surrounding grounds are well laid out, but the neighbourhood is dull and not very healthy.

2. MECKLENBURG-STRELITZ (GRAND DUCHY

Digitized by Google

or), a state of N. Germany, consisting of two separate territorial divisions; the first and largest, or the duchy of Stargard, lying between lat. 53° 9′ and 53° 47′ N., and long. 12° 40′ and 13° 57′ E., having W. Mecklenburg-Schwerin, and surrounded on all other sides by the Prussian territories; and the second, or principality of Ratzeburg, between lat. 53° 40′ and 53° 51′ N., and long. 10° 39′ and 11° E. United area, 997 sq. m. Pop. 99,060 in 1861. The general features of the country are the same as those described in the above art.: its mean elevation is, however, somewhat less than that of Mecklenburg-Schwerin, though the Helpterburg, near Woldeyk, rises to 640 ft. above the sea. The chief river in Stargard is the Havel, and in Ratzeburg the Stepnitz. The land is divided among the sovereign, the nobility, and the towns, in the proportions of about 7-10ths to the first, 2-10ths to the nobles, and 1-10th to the municipalities. Nearly 1-4th part of the grand ducal property consists of forest lands. Agriculture and cattle breeding are the chief branch s of industry here, as in Mecklenburg-Schwerin. The manufactures are even more insignificant than in the latter grand duchy, and almost confined to leather, beer, and spirits, with copper wares in Ratzeburg. There is a brisk trade in rural produce. New Brandenburg is, next to Gustrow, the largest wool-market, and Old Strelitz the largest mart for horses, in Mecklenburg. Furstenburg has some trade in timber and butter.

The government is a feudal monarchy, as in Mecklenburg-Schwerin. Justice is administered in 8 courts of primary jurisdiction, the superior court of Ratzeburg, and the court of chancery in New Strelitz, from which appeal lies to the supreme tribunal at Parchim. The principal public schools are, the *Gymnasium Carolinum* at New Strelitz, the high schools at New Brandenburg, Friedland, and Ratzeburg, and the school of arts (*Bildungsanstalt*) at Mirow. New Strelitz is the cap. and residence of the grand duke. The other chief towns are New Brandenburg, Friedland, and Old Strelitz. Mecklenburg-Strelitz holds, with Mecklenburg-Schwerin, the 14th place in the German Confederation, and has also, with it, 1 vote in the committee, having in the full diet 1 vote independently. It furnishes 1,197 men to the army of the confederation.

Mecklenburg has been several times conquered and disposed of by foreign powers; as by Henry the Lion, in the 12th century by Ferdinand II., who gave it to Wallenstein, and by Napoleon; but it has always reverted to its original dynasty. The reigning family is the only sovereign house of Slavonian origin, and is one of the most ancient in Europe, with all the principal reigning families of which it has been allied. The separation of Mecklenburg into two states took place in 1701, and both were recognised grand-duchies in 1815.

MEDINA, or MEDINET-EL-NABI, the 'town of the Prophet,' one of the sacred cities of Arabia, the burialplace of Mohammed, and, next to Mecca, the great centre of attraction to Mohammedan pilgrims, in the prov. el-Hedjaz, 100 m. NE. its port of Yembo on the Red Sea, and 260 m. N. Mecca. Lat. 25° 13′ N., long. 40° 3′ 15″ E. Pop. of town and suburbs, estim. at 18,000. This celebrated city stands in a plain, close to a chain of hills which bounds the great desert westward. It is not open, like Mecca, but surrounded by a wall about 40 ft. high, and flanked by 30 towers: it was additionally fortified with a ditch by the Wahabees; but this is in most places nearly filled up. It is entered by three fine gates: one of which, towards the S., called Bab-el-Masry, is said by Burckhardt to rank second only to the noble gates of Cairo: a fourth gate, in the S. wall, was closed by the Wahabees, and has not since been re-opened. The houses are well built, of a dark grey stone; but it has a desolate appearance, owing to the lessened resort of pilgrims. Ruined houses and tottering walls are seen in every part of the town; and 'Medina presents the same disheartening view as most of the eastern towns, which now afford but faint images of their ancient splendour.' (Burckhardt's Arabia, ii. 150.) The principal street, in which are most of the shops, leads from the Cairo gate to the great mosque; another, of respectable size and breadth, runs from the mosque to the Syrian gate; but many of its houses are in ruins, and there are few shops. No shops or bazaars, however, are found in other parts of the town; and, in this respect, Medina differs from Mecca, which is one continued market. The suburbs cover more ground than the city itself, from which they are separated by an open space, narrow on the S., but widening on the W., before the Cairo gate, where it forms a large public place called *Monákha*, always crowded with camels and Bedouins. Provisions are sold here in sheds erected for the purpose, and the numerous coffee huts are beset the whole day with visitors. The greater part of the suburbs consist of large court-yards, built round with low houses, tenanted chiefly by the humbler classes. Each *hosh*, or court-yard, contains 30 or 40 families; the cattle belonging to the little community occupy the centre of each, and the only gate of entrance is regularly closed at night. Opposite, however, to the gate of Cairo are several regular and well-built streets, with houses similar to those within the town; one of these, called El-Ambarye, comprises some of the handsomest residences in Medina, besides two rather large mosques, all now remaining, except the great temple, out of 14 mentioned by the Arabian historians. The town is supplied with good water, both from wells and open streams.

The glory of Medina, and that which places it, as a sacred city, almost on a level with Mecca, is the possession of the tomb containing the remains of the Prophet. This tomb, with the tombs of Abou-Beker and Omar, the friends and immediate successors of the Prophet, are enclosed within the great mosque, situated at the E. end of the town. Though smaller than the mosque at Mecca, it is built upon the same plan, with minarets at the angles, and forms an open square, surrounded on all sides by covered colonnades. The tombs are enclosed within a curtain, in a square building of black stone, detached from the walls of the mosque, and surrounded by a close iron railing. People of rank are admitted gratis within the sacred precinct, called *El Hedjra*; and any one, indeed, who has money to spare, finds but little difficulty in being admitted. The ridiculous stories, long current in Europe, as to Mohammed's coffin being suspended in the air by a loadstone, are unknown in the East; and most part of the statements that have been put forth, as to the richness and magnificence of the tombs and the great mosque, have been absurdly exaggerated. The tomb of Fatima, the favourite daughter of the Prophet, and the wife of Ali, is also within the great mosque; but it is doubtful whether it really encloses her remains. The lofty dome, which rises above the tombs, is seen at a great distance from the town. The ceremonies observed by persons visiting Medina are somewhat different from those customary at Mecca; nor is it absolutely required of the hadjis to visit the Prophet's tomb; and hence it is that the enjoined religious duties are considerably less tedious. The building is lighted at night with

Digitized by Google

lamps and candles, sent either from Cairo or Constantinople. The mosque has four gates, of which the principal, by which the pilgrims first enter, called Bab Merouán, is certainly very superior in beauty to any of the gates at Mecca. The police, cleansing, and lighting of the mosque, are entrusted to about 40 eunuchs, somewhat similar to those of the Beitullah at Mecca, supported, like them, by salaries from Constantinople, and by fees and presents from the hadjis. Besides these, and the Imâms, Mueddins, and Olemas, who are as indispensable here as at Mecca, there are upwards of 500 inferior servants. The mosque, founded by Mohammed himself, immediately after his flight from Mecca, on the spot where his camel first rested in the town, was enlarged by Omar after the Prophet's entombment, and surrounded with walls by Othman. Subsequent caliphs and nobles of Arabia greatly embellished it; but the whole edifice was burnt down A.D. 1508; and so complete was the destruction, that only the interior of the tomb was spared. The present building was erected in 1514, by Kayd Beg, then king of Egypt; since whose time only a few immaterial improvements have been made by the Othman emperors of Constantinople. (Burckhardt's Arabia, ii. 161–305.) The burial-ground of Medina, called *El Bekya*, is another object of extreme veneration, in consequence of its containing the tombs of Ibrahim, Othman, Abbas, the aunts of Mohammed, &c. Another place of pilgrim resort is Djebel-Ohod, about 2 m. from the town; the scene of a conflict between the small army of Mohammed and a very numerous band of idolatrous Koreysh, under Abu Sofyan. The Prophet's uncle, Hamze, fell in the engagement, with 75 others, all of whom are buried on this mountain, the exact spot being marked by a mosque.

The people of Medina, like those of Mecca, are chiefly either foreigners or of foreign extraction, drawn thither by the Prophet's tomb, and the gains which it ensures to its neighbours. The number of sherifs, indeed, descended from Hassan, the Prophet's grandson, is very considerable; but most of them come from Mecca, or elsewhere, and nearly all are olemas, or clergymen. The pop. presents, therefore, as motley a race as that of Mecca; and Arabians of every district, Egyptians, Africans, Syrians, and Turks of Anatolia, are found here, more or less naturalised by intermarriage; those long settled being characterised, as at Mecca, by the Arab face, expressive cast of features, and stout thick-set person.

With respect to commerce, Medina widely differs from Mecca; for, while the latter is enriched by a transit trade scarcely inferior to that of any great city in the East, the trade of the former is merely for the consumption of the town and its neighbourhood, the articles being chiefly received from Egypt, by way of Yembo. The provision trade is a lucrative branch of traffic; and the richer merchants often realise enormous profits when the caravans stay for any considerable time, and exhaust the stores of the smaller dealers. The Bedouins supply the town with sheep, butter, honey, and charcoal, taking in return corn and clothing; but the trade is subject to great fluctuations, in consequence of continual enmities between the tribes. The date and lotus fruit are produced in large quantities in the neighbouring gardens, the former of these being the prime article of food, and brought thither from all the surrounding country. As respects native industry, Medina is as ill situated as Mecca, wanting the commonest mechanics, and not even possessing a pottery. Weaving, dyeing, and tanning are arts wholly unknown, nor is there a single person in the whole city capable of making either a nail or a horseshoe, unless it be at pilgrim-time, when many of the poorest hadjis endeavour by hard labour to earn the money necessary for their journey homewards.

The climate of Medina is, during the winter, much colder than at Mecca. Rain falls irregularly at that season, often in violent storms, lasting for two or three days, but in some years so sparingly as to cause a general dearth, from the want of proper irrigation. The summer heat is alleged to be greater than in any other part of the Hedjaz; and the salt-marshes, stagnant pools, and exhalations from the neighbouring date-groves, are powerful agents in producing those intermittent fevers, which are so common, and often fatal in the city, especially to visitors.

Medina, though probably not entitled to rank as one of the cities of what is considered the Hedjaz, has always, since the establishment of Mohammedanism, been considered as a separate principality, and independent even of Mecca.

MEDINA DEL CAMPO, a town of Spain, kingd. of Leon, prov. Valladolid, on the Zapardiel, a trib. of the Douro, 27 m. SSW. Valladolid, and 83 m. NW. Madrid. Pop. 4,208 in 1857. The town on both sides the river (crossed here by a stone bridge), has a neat square, with a handsome sculptured fountain in its centre. The houses are mostly very old, and many of them quite in ruins. A collegiate and 6 other churches, several monasteries (now uninhabited), and 2 hospitals, one of which has considerable architectural merit, are its chief public buildings; but most of them show, by their dilapidated appearance, the degraded condition of the place. The inhab. are chiefly employed in agriculture. It has two weekly markets, and a fair in February, well attended by traders from Toledo, Segovia, and Cuença.

Medina del Campo occupies the site of the ancient *Methymna Campestris*, and was formerly a place of considerable importance; but in the 17th century, after the discovery of America, a large part of its pop. emigrated, and its decay has since been hastened by the internal troubles of the country.

MEDINA DE RIO SECO, a town of Spain, kingd. of Leon, prov. Valladolid, on the Sequillo, a trib. of the Douro, 52 m. SSE. Leon, and 122 m. NW. Madrid. Pop. 4,960 in 1857. The town stands in an open plain, W. of the river, crossed here by 3 bridges, and has narrow, badly-paved streets, and shabby decaying houses: there are 3 churches, 4 monasteries, 2 hospitals, and a castle; but, with the single exception of the church of St. Maria, all the public buildings are in a ruinous condition. The inhab. were once so celebrated for their industry and the variety of manufactured goods exhibited at its fairs in April and September, that the district acquired the name of *India chica* (the Little Indies); but every trace of its former prosperity has now disappeared, and the pop. ranks at present among the least industrious in Spain.

MEDINA SIDONIA, a town of Spain, in Andalusia, prov. Cadiz, 22 m. E. by S. Cadiz, and 65 m. S. Seville. Pop. 9,703 in 1857. It is an old walled town, beautifully situated on the brow of a rocky eminence, looking eastward over a fine champagne country. A castle, 2 par. churches, 6 monasteries, and 2 hospitals are the only public buildings. The chief employment of the inhab. is the manufacture of earthenware, which is conducted on a large scale, furnishing the principal supply for Cadiz, Seville, and indeed the whole of Andalusia. The neighbourhood is celebrated for its fine pastures, and the rearing of cattle forms the chief occupation of the rural pop.

MEDITERRANEAN SEA (the *Mare Internum*

Digitized by Google

of the ancients, and, more recently, the *Mare Mediterraneum*), a large and very important inl. sea, bounded N. by Europe, E. by Asia, and S. by Africa, communicating at its W. extremity, by the Straits of Gibraltar, with the N. Atlantic Ocean, and at its NE. extremity, by the Dardanelles and Bosphorus, with the Black or Euxine Sea. It extends, in a general sense, from lat. 30° to nearly 46° N., and from long. 5° 54′ W. to 36° 8′ E. Greatest length, 2,300 m.; do. breadth, from Venice to the Bay of Sidra, 1,200 m.; estimated area, nearly 690,000 sq. m. It is of an oblong, but very irregular shape, especially on its N. side, into which project southward the two large peninsulas of Italy and Greece, which thus divide the Mediterranean into three basins, the most westerly of which is included between the Straits of Gibraltar and the passage, only 72 m. broad, between C. Boco in Sicily and C. Bon in Africa; the central part extending eastward from the last-mentioned points to the meridian of C. Matapan in the Morea; while the E. basin, called the Levant, comprises the Grecian Archipelago and the sea that washes the coasts of Karamania, Syria, and Egypt. The principal inlets of the W. basin are the bays of Lyons, Genoa, and Naples: it contains also the three large islands of Corsica, Sardinia, and Sicily; the Lipari, and other islands on the W. side of Italy; and the Belearic group, off the coast of Spain. The central basin has a large arm projecting N. under the name of the Adriatic Sea; its smaller inlets being the Gulfs of Taranto in Italy, Lepanto in Greece, and Cabes and Sidra (an. the two *Syrtes*) in Africa: Malta, the Ionian Isles, and the numerous rocky islets skirting the shores of Dalmatia, are its chief islands. The portion of the E. basin or Levant, which stretches N. from the isle of Candia to the coast of Macedonia, is called the Archipelago, and is remarkable, not only for the extreme irregularity of its coast-line, but for the numerous clusters of volcanic islands and rocks that stud its surface; its chief gulfs are those of Egina, Salonika, Contessa, and Smyrna; and its largest islands are Lemnos, Mytilene, Thasos, Scio, and Naxia. The great island of Cyprus lies in the angle between the coasts of Asia Minor and Syria.

The coast of the Mediterranean is as remarkable for difference of altitude as for variety of outline. Its N. shores, as might be inferred from their jagged outline, are generally steep and bold; but in parts, as in Spain and France, near the mouths of the Ebro and the Rhone, and on the western coasts of Italy, the shores are low and gently shelving, varied only by a few bold rocky headlands; the S. side of Sicily and the W. shores of the Adriatic are also, with a few exceptions, flat and sandy; but in Istria, Dalmatia, and, in short, all along the E. side of the Adriatic, the coast is bold, broken, and irregular, often presenting cliffs rising between 600 and 700 ft. in perpendicular height, with deep soundings close to the shore. The shores of the Archipelago partake, more or less, of the same bold character, except in a few bays, where rivers, by the constant deposition of alluvial soil at their mouths, have formed low beaches, extending considerably beyond the high rocks usual to this coast.

The S. coast of Anatolia, which has a less indented line of shore, though by no means low, is much less craggy and precipitous; extremely high promontories here and there stretch out into the deep sea; but beaches, more or less shelving, of shingle, gravel, or sand, are by far the most common on this coast. The cliffs about Iskenderoon are of great height, running round the bay, and furnishing complete security for shipping, except from the E., or land breezes, which are both violent and dangerous. The shores of Syria are mountainous between Tripoli and Tyre, but present, in many places, a large extent of low and flat coast, especially towards the S. extremity.

Near the mouth of the Nile the country presents a low uninteresting flat, with rocky reefs and shoals, projecting from 5 to 7 m. from the shore; and this continues as far W. as long. 27° E., beyond which a series of not very high cliffs, varied here and there by sandy bays (the largest being those of Sidra and Cabes), marks the whole African coast as far as C. Spartel. Submarine rocks and projecting shoals of mud and sand, not less than the roving piratical habits of the Moors, render the navigation of these shores both difficult and dangerous; and, in this respect, the S. side of this sea presents a striking contrast to the N., where, generally speaking, deep soundings may be had close in shore; while in parts, particularly between Nice and Genoa, and near Gibraltar, no soundings can be found under 1,000 fathoms and upwards. The in-shore navigation presents some difficulties, in consequence of a few hidden rocks; but the chief skill of the mariner is required in the Archipelago, where, though there be few hidden dangers, it requires first-rate experience of its shifting winds and currents to guide him safely through its many intricate channels.

It is a curious fact that, though the Mediterranean generally be so deep that soundings, even where possible, are of no practical utility, except in some of its bays and harbours, the depth of the channel between Sicily and Tunis, no where exceeds 30 fathoms, the average not being greater than the depth of the Straits of Dover between England and France. The temperature of its water is, at an average, from 72° to 76°, or 3½° Fah. higher than the W. part of the Atlantic Ocean; but it does not appear, from the experiments of Marcet and Woollaston, that its density exceeds that of many ordinary samples of sea-water. (Lyell's Geology, ii. 17.) The chief feeders of the Mediterranean are the Ebro, Rhone, Po, and Nile, with the various waters brought from the Black Sea by the strong current that sets W. through the Dardanelles. But, notwithstanding this vast supply, the evaporation is so rapid, that water constantly passes in through the Straits of Gibraltar, to restore the equilibrium. The Mediterranean has long been considered a tideless sea; but this is not strictly true: for, in the Adriatic, as well as between that sea and the coast of Africa, tides rise from 5 to 7 ft., and their influence is felt, more or less, along the shores of Sicily, and on the W. side of the Morea. The existence of this tide, indeed, may suggest an explanation of the loss of so many vessels in that region of mist and terror, the Gulf of Sidra, where there is always a lofty swell and accumulation of waters during the prevalence of NW. winds. A tide of 8 or 9 ft. also ebbs and flows at pretty regular intervals in the smaller gulf of Cabes, on the same coast. In the Straits of Messina and Bonifacio, at Naples, in the narrow channel of the Euripus, and on both shores of the Straits of Gibraltar, there is an ebb and flow amounting to 3 ft. and upwards; but whether these movements are to be attributed to lunar influence, or to other causes, has not been determined. The currents peculiar to this great inland sea vary in its different parts: a current sets E. along the African shores, which is turned northward along the coast of Syria, and then westward along that of Cyprus and Karamania: the current in the Archipelago sets almost continually to the S., being increased or retarded, according to the winds: in the Adriatic the current runs NW. up the coast of Albania, and SE. down the Italian shores, bringing

Digitized by Google

with it the waters of the Po. A strong current runs through the Faro of Messina (the Scylla and Charybdis of antiquity), and by meeting a lateral current, causes numerous eddies and whirlpools. (See SCYLLA and CHARYBDIS.)

This strait, notwithstanding the statements in the classics, presents no real danger; and, in the late war, it was traversed by the fleet under Lord Nelson. In the Straits of Gibraltar, the main current sets eastward, at a rate varying from 3 to 6 m. an hour: it is true that an under-current has long been supposed to run in an opposite direction; but the fallacy of this hypothesis has been fully shown by Mr. Lyell; and it seems that the only outlet for the superfluous water is by the lateral current, which runs westward close to the African shore. (Geology, ii. 19.) With respect to the winds of the Mediterranean, it may be observed that the prevalent winds, except during spring, vary between NW. and NE., while those in spring are from SE. to SW. But the winds are extremely variable, and it is said that 3 or 4 vessels may occasionally be seen carrying different, and sometimes opposite, winds at the same time. The *Bora*, a violent NE. wind in the Adriatic, the *Etesian*, or NE., winds (called also *Tramontana*), which blow for several months together in the Archipelago, and the *sirocco*, or *solano*, are peculiar to this sea. The last of these is extremely troublesome, producing great dejection and lassitude. At its commencement the air is dense and hazy, with long white clouds floating just above, and parallel to, the horizon. The thermometer rises to 90° or 95°, sometimes 100°, and the barometer gradually sinks to about 29·60°. It generally continues during three or four days; during which period, such is its influence, that wine cannot be fined, or meat effectually salted: oil-paint laid on during its continuance will seldom harden. But, though blighting in its general effects during summer, it is favourable to the growth of many useful plants in winter, when, indeed, it has few disagreeable qualities.

Waterspouts are of very common occurrence, especially on the coast of Asia Minor, where as many as sixteen have been seen at one time. Many volcanic phenomena have also been observed in this sea; among which may be mentioned the sudden appearance, in 1831, of an island, about 30 m. SW. of Sciacca in Sicily, and its equally sudden disappearance, three years afterwards. These movements may result from the close proximity of the large igneous region of Italy and Sicily. The presence of electric fluid in the atmosphere is also proved by the play of flame round the mast-heads, called by sailors 'the fire of St. Elmo.' Several springs of fresh water rise in different parts of the Mediterranean: the largest of these is in the port of Taranto, near the mouth of the Galesus, where the fresh water ascends in such a volume, and with such impetuosity, that it may be taken up at the surface without the least impregnation of salt; but the most celebrated of these fountains is that of Arethusa, in the harbour of Syracuse.

The Mediterranean abounds with fish of many different varieties, as well as with mollusca. The tunny and anchovy fisheries are a source of great profit on the coast of Italy and Sicily: the sword-fish is very common; and the *murex purpura* supplies the fine Tyrian dye, now, as anciently, celebrated for the brightness of its red colour. Coral is found on many parts of the Barbary coast, and in some of the bays of Corsica and Sardinia. The chief fishery, however, is in the straits of Messina, where there is a coral-ground upwards of 6 m. in length.

In the Scriptures, the Mediterranean is called 'the Great Sea' (Num. xxxiv. 6). Herodotus calls it (i. 185) 'the Sea;' and Strabo, 'the Sea within the Columns' (Θάλαττα ἡ ἔσω τῶν στηλῶν) It is probable that it witnessed the first rude attempts at navigation. 'Having,' as Dr. Smith has justly observed, 'no (perceptible) tides, nor, consequently, any waves, except such as are caused by the wind only, the Mediterranean was, by the smoothness of its surface, as well as by the multitude of its islands, and the proximity of its neighbouring shores, extremely favourable to the infant navigation of the world; when, from their ignorance of the compass, men were afraid to quit the view of the coast, and, from the imperfection of the art of ship-building, to abandon themselves to the boisterous waves of the ocean.' (Wealth of Nations, book i. cap. 3.) At all events it was navigated, and its islands occupied, in the remotest antiquity: it subsequently was traversed in all directions by the ships of the Phœnicians, and their descendants, the Carthaginians; and, at a later period, by those of the Greeks and Romans. During the middle ages, and down to the discovery of America, it was the grand centre of the commerce and navigation of the old world; and the Venetians and Genoese, by whom its trade was for a while principally engrossed, attained, in consequence, to great wealth and consideration. The discovery of America and of a route to India by the Cape of Good Hope, opened new and far more extensive channels for maritime enterprise. But we incline to think that the depression of the Mediterranean trade, in the 16th, 17th, and 18th centuries, was principally owing to the circumstance of the countries round the Black Sea, the Levant, and the whole N. shore of Africa, having been shortly before subjugated by the Turks, the implacable foes of art, civilisation, and refinement. Happily, however, their empire has been, to a considerable extent, dismembered; and, within the course of the present century, the trade of the Mediterranean has begun to resume something like its former importance. The opening of the Black Sea, and the rise of Odessa and other towns on its shores, the renewed intercourse with India by Alexandria, the occupation of Malta by the English, and of Algiers by the French, the independence of Greece, and the establishment of steamers between the principal ports of the sea, have enormously extended its commerce and navigation.

The Mediterranean has on its shores the capital cities of Naples, Palermo, Athens, Tripoli, Tunis, and Algiers. Among its principal emporiums may be specified Marseilles, Genoa, Leghorn, Civita-Vecchia, Venice, Trieste, Syria, Smyrna, Alexandria, Malaga, and Barcelona. Its most important naval stations are those of Malta and Toulon: Gibraltar is, as it were, the key of the sea.

To the scholar and classical traveller the Mediterranean has the most powerful attractions. Her shores were the earliest seats of art, science, and civilisation. She has been surrounded and occupied by the most renowned nations of antiquity; and her coasts and islands have still to boast the ruins of some of the noblest and most splendid cities of the ancient world. In short, to use the language of Dr. Johnson, 'the grand object of all travelling is to see the shores of the Mediterranean. On those shores were the four great empires of the world; the Assyrian, the Persian, the Grecian, and the Roman. All our religion, almost all our law, almost all our arts, almost all that sets us above savages, has come to us from the shores of the Mediterranean.

MEDWAY, an important river of England,

Digitized by Google

which has its embouchure in the æstuary of the Thames. It rises in the SE. corner of Surrey, between the N. and S. chalk ranges; being joined at Penshurst Place by streams from the S. of Sussex. Its course is thence NE. to Maidstone, and then N. to Rochester and Chatham, about 2 m. below which it turns nearly E., expanding at the same time into a wide æstuary, interspersed with islands. After prosecuting an easterly course for 8 or 10 m., it turns once more to the N., uniting with the æstuary of the Thames at Sheerness. The tide is interrupted by locks, otherwise it would flow up the river to Maidstone. In consequence of works begun in the reign of Charles II., and resumed at different periods, it has been rendered navigable as far as Tonbridge; affording a channel of communication of much importance to the surrounding country. From Sheerness to Chatham there is water to float the largest ships; and the ground being soft, and the reaches short, it forms an admirable harbour for men-of-war, many of which are usually laid up here when out of commission. (See CHATHAM.)

The Medway was called by the ancient Britons *Vaga*, to which the Saxons prefixed the syllable *Mad*, signifying mid or middle, because it ran through the middle of the kingdom of Kent: hence it came to be called Medweg, and latterly Medway. Considering the shortness of its course, the Medway is one of the deepest of European rivers.

MEERUT, a district of British India, presid. Agra (Bengal), chiefly between lat. 28° 30′ and 29° 30′ N., and long. 77° and 78° E., having N. the collectorate of Mozuffernugggur, E. that of Moradabad, S. Boolundshahur, and W. Paniput. Area, 2,250 sq. m. The chief towns are Meerut, Sirdhuna, Katouli, and Hustinapoor.

MEERUT, a town of British India, presid. Agra, cap. of the above district, in an extensive grassy plain, 30 m. NE. Delhi. This, which, like Cawnpoor, is a military station, is a much more agreeable residence than the latter. The town is surrounded by a dilapidated brick wall, and has a ruined fort or citadel. The streets are narrow and mean, and the houses mostly of mud; but it has some good architectural remains of mosques and pagodas; and without the walls are various Mohammedan tombs, built of red stone. A small stream, which swells into a river during the rainy season, is here crossed by a handsome bridge. The cantonments are at some distance N. of the town, from which they are separated by a long and busy bazaar. The barracks are one story in height, and disposed in regular ranges, at intervals, along a space about 2 m. in length: the bungalows of the officers are surrounded with gardens, enclosed by tall hedge-rows. The church of Meerut is one of the largest in British India, being 150 ft. in length, by 84 ft. in breadth, and capable of accommodating 3,000 people. There is a good free school here, with about 100 native pupils.

Meerut was a city of some consequence before the Mohammedan invasion of India. It was taken by Mahmoud, of Ghiznee, in 1018, and by Timour in 1399. It was occupied, with its district, by the British in 1803. In the great Indian revolt of 1857, Meerut was sadly distinguished for its scenes of barbarity, perpetrated by the Sepoys. The revolt broke out here on the 10th of May, a Sunday evening, when the native troops set fire to the cantonments, and massacred every European they met with, women and children as well as men.

MEININGEN (SAXE), or SAXE-MEININGEN-HILDBURGHAUSEN (DUCHY OF), an indep. state of Central Germany, consisting of a crescent-shaped territory, between the 50th and 51st degs. of lat., and long. 10° 10′ and 11° 25′ E.; enclosed on the S. by the territories of Coburg and Bavaria, and on the other sides by the dom. of Cobourg, Schwartzenburg, Prussia, Hesse-Cassel, and Weimar. Area, 933 sq. m. Pop. 172,341 in 1861. This duchy comprises a portion of the Thuringian forest mountains; one of which, the Dollmar, rises to 2,370 ft. above the sea. The remainder of Saxe-Meiningen is chiefly comprised in the vale of the river Werra, by which it is traversed in a NW. direction. This last portion of the duchy, though one of the most fertile districts in Germany, does not, however, produce enough of corn for the consumption of its inhab. Tobacco, turnips, and fruit are staple products; and the forests and cattle of the duchy are among its most important sources of wealth. Mining is pretty actively pursued; iron, a little copper, coal, alum, and vitriol being produced: it has also marble quarries, and furnishes about 120,000 cwt. of salt a year. The manufacture of hardware and the weaving of linens and woollens are the chief remaining branches of industry; but a number of hands are also employed in making wooden articles and toys. The government is a limited monarchy, and, in nearly all respects, similar to that of Saxe-Weimar (which see). The high court of appeal in Jena is the supreme tribunal for this duchy. The inhab., who are nearly all Lutherans, are quite as well educated as those of the rest of Saxony. Primary schools are numerous; there are superior schools, or colleges, in all the towns, and the state has a considerable share in the direction and patronage of the University of Jena and of the Prussian gymnasium at Schleusingen, near Erfurt. Public revenue, 160,691*l.* in 1863, which was about equal to the expenditure. The public debt, at the same time, amounted to 382,835*l.* Saxe-Meiningen has one vote in the full council of the German Confederation, and a vote in the committee, conjointly with Saxe-Weimar, Cobourg, and Altenburg, together with which it holds the 14th place in the diet. It furnishes 1,918 men to the army of the Confederation.

MEININGEN, a town of Central Germany, cap. of the above duchy, on the Werra, here crossed by two stone bridges, 31 m. ENE. Fulda, on the railway from Eisenach to Cobourg. Pop. 6,450 in 1861. The town is encircled by wooded hills, is well built and laid out, and surrounded with ramparts and ditches. In the palace, which has been the residence of the dukes since 1681, are collections of paintings, engravings, natural curiosities, the archives of Meiningen and Weimar, and a library of 24,000 vols. The house of assembly for the states of the duchy, the *bernhardinum*, or gymnasium, the female seminary, riding-school, theatre, and hospital, are the other principal edifices. It has some manufactures of woollen, linen, and mixed fabrics, with tanneries and breweries, and has some of the best public gardens in Germany.

MEISSEN, a town of the kingd. of Saxony, prov. Meissen, on the Elbe, here crossed by a handsome bridge, 14½ m. NW. Dresden, on the railway from Dresden to Leipzig. Pop. 9,806 in 1861. The castle, the Gothic church, and the lofty houses, perched high upon a rocky eminence, have a most imposing effect as you approach Meissen; but the streets are narrow, and the town has internally a gloomy appearance, which is considerably increased by the smoke constantly issuing from the porcelain manufactory. This establishment occupies the castle, built, it is said, by the emperor Henry I. The beautiful pottery ware that goes by the name of Dresden china, is all manufactured here; and though the Meissen potteries

Digitized by Google

are now rivalled by those of Berlin and Vienna, they were at one time the first, and may still be considered the most celebrated, in Europe.

MELBOURNE, the cap. of the British colony of Victoria, in Australia, on the N. bank of the Yarra-Yarra river, about 9 m. (following its windings) from its mouth, in the basin of Port Phillip. Pop. 125,220 in 1861, against 23,143 in 1851. In 1865, the total population of Melbourne, including its suburbs, was estimated at 140,000. The distribution of the population among the town and suburbs at the latter period was as follows:—

Melbourne City	23,700
East Melbourne	2,000
North Melbourne and Carlton	16,000
Fitzroy	11,800
East Collingwood	12,600
Richmond	11,400
Jika-Jika	8,200
South Yarra and Prahran	13,000
Emerald Hill and Sandridge	12,400
St. Kilda and Brighton	11,300
Doutta Galla and Keilor	3,000
Boroondara and Heidelberg	5,700
Cat-paw-paw	6,000

'Twenty-four years since,' says Mr. Kingsley, 'the Yarra rolled its clear waters to the sea, through the unbroken solitude of primeval forests, as yet unseen by the eye of man. Now there stands there a noble city with crowded wharves, containing, with its suburbs, not less than 140,000 inhabitants. One thousand vessels have lain at one time, side by side, off the mouth of that little river, and through the low sandy heads that close the great port towards the sea, thirteen millions sterling of exports is carried away each year by the finest ships in the world. Here, too, are water-works, constructed at fabulous expense; a service of steamships between this and the other great cities of Australia, vying in speed and accommodation with the coasting steamers of Great Britain; noble churches, handsome theatres; in short, a great city, which, in amazing rapidity of growth, utterly surpasses all human experience.'

Melbourne was founded in 1837, and extends along the banks of the river. The site of the town is not very fortunate, inasmuch as the Yarra-Yarra is obstructed by a bar and shallows, and it has the farther disadvantage of being low, and liable to be flooded by the overflowing of the river during the wet season. The first difficulty has been overcome by making Williamstown, further down the river, the port of Melbourne, and connecting it with the town by a railway. Melbourne proper, or the city as first laid out, consists of several very wide straight streets, at right angles or parallel to one another. Flinders, Collins, Bourke, Latrobe streets run east and west, and are parallel to each other. They are crossed at right angles by several other streets, among which may be mentioned Elizabeth and Swanstone streets. Along each side of the roadway the gutters are generally running with water; and Elizabeth Street sometimes becomes quite flooded after the heavy rains, so as to be impassable, except for carts. These rectangular blocks of streets soon became too compressed for Melbourne's necessities, and though they still monopolise the chief shops, banks, and places of business, yet the city has extended to its suburbs, and now, under the name of Melbourne, are included Collingwood, Richmond, and North Melbourne, formerly detached districts.

'Melbourne,' says the author of 'Southern Lights and Shadows,' 'is a splendid town. Fine wide streets, finer and wider than almost any in London, stretch away, sometimes for miles, in every direction, and every hour of the day thousands of persons may be seen hurrying along the leading thoroughfares with true Cheapside bustle and eagerness. Hundreds of cabs and jaunting cars rattle through the streets; trains run shrieking in from Geelong and the suburbs every ten or twelve minutes. All the classic cries of London, from hot potatoes to iced ginger beer, echo through the streets; restaurants and well-furnished coffee-houses send out the alluring perfumes of their shilling luncheons at every hundred yards; while at each populous point of the city, rival newsboys make both day and night hideous with their constant and competitive yelling.'

Melbourne has Episcopalian, Presbyterian, R. Catholic, Independent, Methodist, and Baptist churches, and a much frequented university, founded in 1855. Of public institutions there are in Melbourne an Acclimatisation Society, Benevolent Asylum, Bible Society, ten building societies, Chamber of Commerce, eight clubs, three gas companies, Horticultural Society, two hospitals, seventeen Improvement societies, Law Institute, public library of 30,000 volumes, six mechanics' institutes, medical society, orphan asylum, four musical associations, Royal Society, twenty-four insurance companies, seven steam navigation companies, a Zoological Society, with zoological gardens, three theatres, five music halls, and a Polytechnic Institution.

The trade of Melbourne represents very nearly that of the whole colony of Victoria. In 1863 there entered the port 1,739 vessels, of a total burden of 624,061 tons, and there cleared 1,782 vessels, of 618,052 tons burden. The total value of the imports in 1863 amounted to 13,487,787*l.*, and of the exports to 13,039,422*l.*

Melbourne is connected by railway with Geelong, Ballarat, and Sandhurst, at the Bendigo gold-fields, as well as with Williamstown, its port.

MELFORD, LONG, a market town and par. of England, co. Suffolk, hund. Babergh, 17½ m. W. Ipswich, and 51 m. NE. London. Pop. of par. 2,870 in 1861. Area of par. 4,320 acres. The town is very pleasantly situated in a picturesque and well wooded country, and consists chiefly of one main street, nearly 1 m. in length. A handsome Gothic church, two places of worship for dissenters, and an almshouse (founded in 1573) for twelve poor men and two women, are the only public buildings. Spinning, woollen weaving, and retail trade are the chief occupations of the inhab. The weekly market once held here has been discontinued for some years. Cattle and sheep fairs, Tuesday, Wednesday, and Thursday in Whitsunweek.

MELKSHAM, a market town and par. of England, co. Wilts, hund. its own name, 26 m. NW. Salisbury, 86 m. W. London by road, and 99 m. by Great Western railway. Pop. of town, 2,452, and of par. 5,337 in 1861. Area of par. 10,750 acres. The town, formerly much more important than at present, on an acclivity rising from the Avon, consists principally of one long street, with stone houses. The church is a large, old, embattled building, with a central tower and two transepts, both on the S. side: the living is a vicarage, in the gift of the dean and chapter of Salisbury. There are, also, places of worship for Independents, Baptists, and the Society of Friends. The staple business of Melksham is the manufacture of woollen cloth; but it has greatly declined, in consequence of the superior facilities enjoyed by the clothing district of Yorkshire. Petty sessions for the hund. are held here. Markets for cattle, &c. on alternate Thursdays; fair for horses, cattle, and farming stock, July 27.

MELROSE, a village of Scotland, co. Rox-

Digitized by Google

burgh, beautifully situated at the N. foot of the Eildon Hills, on the Tweed, 31 m. SE. Edinburgh, on the Edinburgh and Hawick railway. Pop. 1,141 in 1861. Melrose is celebrated for possessing the finest monastic ruin in Scotland. The abbey of Melrose, originally founded by David I., in 1136, for Cistercian monks, was destroyed by the English forces, under Edward II., in 1322. The structure, of which the mutilated remains still attest the grandeur and magnificence, was founded by Robert Bruce, the hero of Bannockburn, in 1326. It was finally completed, in the perpendicular Gothic style, in the reign of James IV., and must, when entire, have been one of the noblest structures of the kind in the kingdom. This splendid edifice was well nigh demolished by the barbarous zeal of the early reformers. In fact, with the exception of a part of the cloister walls, the abbey has been wholly destroyed; but fortunately a considerable part of the church has been preserved. The great altar or eastern window, 36 ft. in height by 16 ft. in width, is unrivalled for its fine proportions, the richness of its tracery, and the beauty and delicacy of its workmanship. It has been admirably described by Scott:—

'The moon on the east oriel shone,
Through slender shafts of shapely stone,
By foliag'd tracery combin'd;
Thou would'st have thought some fairy hand
'Twixt poplars straight the osier wand,
In many a freakish knot had twin'd;
Then fram'd a spell when the work was done,
And chang'd the willow-wreaths to stone.'
Minstrel, canto ii. st. 11.

The south transept window and door is, perhaps, the most perfect part of the ruin. It is in the decorated style, with crockets and creeping foliage. The compartment of the nave, from the screen work to the cross, was roofed over, and fitted up, in 1618, for the par. church. But this roof does not harmonise with the rest of the fabric; and it is obvious that the stones of which it consists had been quarried from other parts of the building! A great tower rose from the centre of the cross, of which a portion, 84 ft. in height, still remains; but the spire by which it was surmounted is entirely gone. The decorated work and masonry of the building have been most admirably executed; the mouldings are still as sharp as if they were fresh from the chisel.

Abbotsford, the seat and creation of Sir Walter Scott, is situated about 3 m. W. from Melrose; and Dryburgh Abbey, where the great minstrel is buried, is about 3 m. E. from the village.

MELTON-MOWBRAY, a market town and par. of England, co. Leicester, hund. Framland, on the Wreak (a trib. of the Soar), crossed here by three stone bridges, 14 m. NE. Leicester, 92 m. N. by W. London by road, and 112½ m. by Midland railway. Pop. of town 4,047, and of par. 4,936 in 1861. Area of par. 5,610 acres. The town has of late years been much improved and enlarged; the houses are generally well built, and the streets are well paved, watched, and lighted. The church is a large and somewhat striking cruciform Gothic building, with a highly ornamented pinnacled tower, rising at the intersection of the nave and transepts: the living is a vicarage, in private patronage. There are places of worship, also, for Wesleyan Methodists and Independents. Three Sunday schools give religious instruction to upwards of 500 children; and two free schools, supported from the town's estate, are attended by about 400 children of both sexes. Melton-Mowbray enjoys a small share of the hosiery and bobbin-net trade, which furnishes employment to many thousands in the co.; but the chief business and celebrity of the town is attributable to its situation in the centre of a fine hunting country, and to its being, as it were, the hunting metropolis. The hunting season lasts from the beginning of Nov. to the end of March; and, during this time, the town is frequented by the leading sportsmen of England, who resort thither from all parts of the country, and a few even from the Continent. The stabling is excellently arranged as well as very extensive, there being accommodation for upwards of 800 horses, with their grooms. The town supports a good subscription library and news-room; and there is a theatre, in which performances are held during the hunting season. Melton has water communication with Leicester by the Wreak and Soar, and with Oakham by a canal. Petty sessions are held here; and this town is one of the polling-places for the N. division of the co. It is likewise the chief place of a poor-law union, comprising 54 pars., and has a very large and well-arranged workhouse. Markets, well attended, for cattle and provisions, on Tuesday; horse fairs, Monday and Tuesday after Jan. 17; cattle fairs, March 13, Holy Thursday, Whit Tuesday, Aug. 21, and Sept. 7.

MELUN (an. *Melodunum*), a town of France, dép. Seine-et-Marne, of which it is the cap.; on an island in and on both sides the Marne, 25 m. SE. Paris, on the railway from Paris to Dijon. Pop. 11,170 in 1861. The town is badly laid out, but is tolerably well built; and, being pleasantly situated, has a prepossessing appearance from without. The different parts of the town are connected by bridges. The part of the town built on the island is the most ancient; it has a large central prison for five dépts., the most conspicuous edifice in the town; and on its E. side are the remains of a palace, inhabited by several of the French kings.

The portion on the right or N. bank of the Marne, called St. Aspais, is the most extensive: it is built on the declivity of a hill, and has a spacious square, an old Gothic par. church, with some fine stained glass, the prefecture, formerly a Benedictine abbey, a theatre, some vapour baths, and the remains of the abbey of St. Pierre, founded under the Merovingian dynasty. The portion on the left bank of the river is less than either of the others; it comprises the cavalry barracks. Melun has a communal college, a public library, with 10,000 vols., a society of agriculture, arts, and sciences, and a school of drawing, with manufactures of woollen cloths, printed cotton and linen goods, and glass, and some trade in corn and other products destined for the Paris markets. Melodunum is mentioned by Cæsar in his Commentaries: it was taken by his lieutenant, Labienus. In the middle ages, it was several times captured by the Normans and English, and was held by the latter from 1419 to 1430.

MEMEL, a fortified sea-port town of Prussia, and one of the principal shipping ports on the Baltic, prov. Prussia, gov. Königsberg, on the NE. side of the entrance to the great salt lake, or lagoon, called the Kurische Haff, but within the bar, 50 m. NW. Tilsit, and 74 m. NNE. Königsberg. Pop. 19,152 in 1861. Memel consists of the portions called the Old Town, New Town, and Frederick's Town, and has several suburbs. It was surrounded by walls in the time of the Teutonic knights, and has a citadel, founded in 1250, now partly used as a prison. It has 4 churches, a synagogue, arsenal, exchange, theatre, high school, school of industry, female seminary, school for neglected children, a hospital, and various charitable institutions. It is the seat of a council for the circle (Landraths-amt), of judi-

Digitized by Google

cial tribunals for the circle and town, a board of taxation, and police commission; and has manufactures of woollen cloth and soap, with docks for ship-building, sawing-works, and distilleries. The harbour is large and safe, with deep water; but the bar, at the mouth of the Kurische Haff, has seldom more than 17 ft. water, and sometimes not more than 12 or 14 ft.; so that ships, drawing more than 15 or 16 ft. water are frequently obliged to load and unload a part of their cargoes in the roads, where the anchorage is but indifferent, particularly when the wind is at the N. or NW. A light-house, originally 75 ft., but now 100 ft. high, has been erected on the NE. side of the entrance to the harbour. The light, which is fixed and powerful, may be distinguished, in clear weather, at more than 20 m. distance. Timber, particularly oak-plank and fir, of the very finest quality, is the great article of export from Memel; but corn, staves, flax and hemp, linseed for crushing, hides, bones, bristles, and wool, are also largely exported. Timber, hemp, and flax, and most other articles shipped from this, and, indeed, from most Baltic ports, are *bracked;* that is, they are inspected, and assorted into three qualities, according to their degrees of goodness, by persons appointed by government for the purpose. (See PETERSBURGH.) Memel sends considerable quantities of corn to Great Britain, receiving in return cotton stuffs and yarn, cutlery, and considerable quantities of coal, which latter, however, is reckoned merely as ballast. The trade of ship-building is carried on to a considerable extent at Memel. The present average export of timber is reckoned at about from 75,000 to 80,000 loads fir timber, 5,000 loads oak timber and plank, 700 mill-oak pipe-staves, and about 600,000 fir planks.

MEMMINGEN, a town of Bavaria, and formerly a free city of the empire, circ. Swabia, cap. distr. on a tributary of the Iller, 40 m. SW. Augsburg, on the railway from Ulm to Kempten. Pop. 6,603 in 1861. The town is walled, and has a handsome town-hall, an arsenal, barracks, a lyceum, an academy of instrumental and vocal music. It has manufactures of woollen, cotton and linen stuffs, stockings, ribbons, oil-cloth, copper and iron wares, with tanneries, linen and cotton printing and dyeing establishments; and an active trade in the products of these, and in salt, wool, corn, hops, &c., which it sends to Switzerland and Italy.

MENAI STRAIT, a strait or channel of N. Wales, separating the island of Anglesea from Caernarvon: it runs NE. and SW. about 14 m., varying in width from about 200 yards to about 2 m. Parliament having contributed a sum of money to assist in improving its navigation, the dangerous rocks, by which it was formerly encumbered, have been removed, so that vessels of moderate burden are able to pass without difficulty through the strait, when it would not be possible for them to double Holyhead.

The Menai Strait is celebrated for the magnificent bridges by which it has been recently crossed. Holyhead being the nearest port to Ireland, and the most convenient place at which to ship and receive the Dublin mails, it became of great public importance that the access to it should be rendered as safe and expeditious as possible. The usual ferry across the strait was in the vicinity of Bangor; and this being frequently attended with both danger and delay, it was resolved to erect, nearly at the same place, a chain bridge, elevated sufficiently above the water to allow ships to pass freely underneath. This undertaking was begun in 1819, and completed in 1825. There are seven stone arches, each of 52½ ft. span; and the length of the catenary, or chain part, is 579 ft. The bridge cost in all 211,791*l.*, and was constructed by the celebrated engineer, Telford.

But this great work has been far surpassed by the tubular bridge, erected in 1848–50, forming a portion of the railway between Chester and Holyhead. It consists of two lines of vast tubes of wrought iron, each line being 1,513 ft. in length, stretching across the strait, one for the railway carriages going to, and the other for those returning from, Holyhead. The tubes rest on abutments and towers on each side the strait, and on a tower in the middle of the latter; the water-way, or length of the tube, or bridge, on each side the central tower, being 460 ft. Like the hanging bridge, it is elevated 100 ft. above the level of high water, and consequently gives no interruption to the navigation. This stupendous work, the contruction of which formed a new æra in engineering, was projected and erected by Robert Stephenson, at a cost of above 600,000*l.*

MENDE, a town of France, dép. Lozère, of which it is the cap., on the Lot, 48 m. ENE. Rodez. Pop. 6,370 in 1861. The town is badly built and laid out, but is well supplied with water by numerous public fountains, and surrounded by a boulevard, forming a public promenade. The cathedral, a Gothic building, has two light spires. The old episcopal palace, now the prefecture, has a gallery and hall, enriched with many paintings by Besnard, an artist of the French school. It has also a public library of 6,600 vols., a communal college, a court of primary jurisdiction, a society of agriculture, science, and art, and a chamber of manufactures. Its inhabs. fabricate coarse woollen cloths, called *serges de Mende,* which are sent into Spain, Italy, and Germany.

MENIN (Flemish *Meenen*), a town of Belgium, prov. W. Flanders, cap. cant. on the Lys, immediately within the Belgian frontier, and 6½ m. SW. Courtrai. Pop. 8,628 in 1860. The town is well fortified, and tolerably well built; is the residence of a military commandant; and has manufactures of woollen yarn, and table and other linen cloths, lace, soap, linseed and other oils, with tanneries, breweries, and large bleaching grounds. It has also a considerable trade in horses, cattle, and agricultural produce, and 2 large annual fairs.

MENTZ, or MAINZ (Fr. *Mayence*, an. *Moguntiacum*), a strongly fortified city of Germany, grand duchy of Hesse-Darmstadt, prov. Rhenish Hesse, of which it is the cap., on the left or W. bank of the Rhine, nearly opposite its junction with the Mayn, 18 m. WSW. Frankfort, and 38 m. SE. Coblentz, on the railway from Frankfort to Coblentz. Pop. 41,191 in 1861, excl. of garrison. The town is built partly on level ground, and partly on the declivity of a hill, in the form of a semicircle, the Rhine formerly the basis of the arch. It is surrounded by strongly-built bastioned walls, and is further defended by extensive outworks, including a citadel, lunettes, and 6 forts. There is a railway bridge over the Rhine, a little above the junction of Rhine and Mayn, while a bridge of boats, 1,666 Rhenish ft. in length, protected by a *tête du pont*, connects Mentz with its fortified suburb of Castel, a town of 2,200 inhab., near which is an island in the river, that is also strongly fortified. A garrison of 30,000 men would be required for the proper defence of the various works. The city is entered by 10 gates, 5 on the land side, and 5 along the river; all which, except on special occasions, are closed at 10 P.M. It has several good streets and squares, but is in most parts irregular, and the streets, which are narrow

Digitized by Google

and dirty, are rendered darker by the loftiness of the houses, many of which have strongly-staunchioned windows: the appearance of the town is, in fact, that of an ancient city, converted into a modern fortress; but it is, notwithstanding, interesting from its antiquity, and its numerous public edifices. The cathedral, built in the massive round-arched Gothic style, was commenced in the 10th, and finished in the 12th century. Like the cathedral of Worms and Spires it has a double choir, and a high altar at both the E. and W. extremities. It was nearly destroyed by fire in 1190, and suffered greatly during the siege of the town by the Prussians, in 1793. But, of late years, extensive repairs have been made upon it, by the aid of voluntary contributions; the nave has been newly roofed with slate, and the great E. tower has been surmounted with an iron cupola, 70 ft. in height. The interior has numerous monuments of the former archbishops of Mentz, who were sovereign princes, and electors of the empire. It has also monuments of various other historical personages. The side chapels abound in fine old carving: the doors of solid brass and great height, opening to the market-place, were cast by the founder of the cathedral, and have engraved on them the charter given to the city by Archbishop Adalbert, in 1135. There are 6 other R. Cath. par. churches, several conventual churches, and a Calvinist church. On the quay beside the river are two large red buildings; one of which, the ancient electoral palace, has been converted into the custom-house; and the other, the Teutonic House, once occupied by Napoleon, is now the residence of the military governor. The former palace of the Prince Dalberg, nearly destroyed by fire in 1793, is used for the courts of justice. The arsenal, on the bank of the Rhine, the theatre, a new and handsome edifice, and the episcopal and vice-governor's palaces, are among the remaining principal public buildings.

Mentz derives celebrity from its having been the residence of Gutenberg, and the cradle of the art of printing. The house in which Gutenberg lived has been taken down, and its site is occupied by a casino, belonging to a literary club. There is a colossal statue of Gutenberg, in bronze, from a model by Thorwaldsen, and another statue, also in bronze, of Schiller. Mentz has a gymnasium, an ecclesiastical seminary, schools of medicine and veterinary surgery, a public library of 90,000 vols., in which are preserved some of the earliest extant specimens of printing; a museum of natural history, antiquities, and coins. Outside the walls are some fine gardens along the bank of the river.

Mentz, formerly the first ecclesiastical city of the Germanic empire, is now of importance chiefly as its strongest fortress and principal military post. Mentz is garrisoned by a nearly equal number of Prussian and Austrian troops, and is commanded by a governor, elected alternately every five years from either nation. It is the seat of a military tribunal, and the high court of justice for Rhenish Hesse, its civil authorities being appointed by the government of Hesse-Darmstadt. The town is so environed, on the river side, by its fortifications and other erections, that the Rhine is but little available for commercial purposes, and the accommodation for craft is very inferior. Nevertheless, Mentz is the chief commercial town in the grand duchy, and, next to Cologne, the chief mart for Rhenish produce in Germany. Steamers leave almost hourly to Coblentz, Bonn, Cologne, and all the towns on the lower Rhine, as far as Rotterdam. It has a considerable trade in corn, wine, and timber, and manufactures of leather, soap, hats, glue, vinegar, tobacco, and musical instruments.

Though Mentz abounds in historical associations, its existing vestiges of antiquity are very few. Agrippa, the general of Augustus, established an entrenched camp on the site where Drusus Germanicus, about *anno* 10 B.C., erected a fort called *Moguntiacum*. Drusus afterwards founded a second fort (*Castellum*) on the opposite bank of the Rhine; and the two were, at a subsequent period, connected by a Roman bridge, portions of some of the piers of which may still be seen when the water is low. In the citadel is the Eichelstein, a stone tower, alleged to have been erected by Drusus. At Zahlbach, not far from Mentz, are the remains of an ancient aqueduct; and between the two, a Roman cemetery has been discovered. The city, which was almost wholly destroyed in the wars at the fall of the Roman empire, was restored by Charlemagne, who erected a church, and rebuilt the bridge with timber. In the 13th and 14th centuries Mentz was a place of some note for literature and the arts. In 1631, it was taken by the Swedes; in 1644, 1688, and 1792, by the French; it was bombarded and taken by the Prussians in 1793; but, being re-taken by the French in 1797, it became, during their ascendancy, the cap. of the dép. Mont-Tonnerre. It was finally annexed to the grand-duchy of Hesse-Darmstadt at the congress of Vienna, in 1815.

MEQUINEZ, a large city of Morocco, and one of the residences of the emperor, 70 m. E. Salee, and 235 m. NNE. Morocco; lat. 33° 56′ N., long. 5° 59′ W. Pop., differently estimated, at from 50,000 to above 100,000. It stands in a beautiful, well-watered, and very fruitful valley, and is surrounded by a wall about 6 ft. high, built for a defence against the marauding Berbers. It owes its present extent and consequence to the late sultan, Muley Ismael; who, after having secured to himself the undisputed sovereignty of the kingdoms now forming the empire of Morocco, made Mequinez one of the caps., considerably enlarged it, and erected a fine palace, which, owing to its having only one story, is of great apparent extent. In the centre of the enclosure, which contains several well-laid-out gardens, is the emperor's harem, formed by a four-sided colonnade, above which are various apartments for the women, eunuchs, and female attendants. The rooms are each about 20 ft. long, by 12 ft. broad, and 18 ft. high; the walls are inlaid with red and blue tiles, and the light is communicated by means of two large folding-doors. Between the chief apartments are paved courts of chequered marble, in the centre of most of which is a fine marble fountain. The houses of Mequinez are neater than those of Morocco; but the streets are not paved; and hence in rains they are full of mud, and in dry weather of dust. The millah, or Jews' quarter, is walled round, extensive, and in good repair; but the Negroes' quarter is now a mere ruin. About a century ago a convent was formed here by the king of Spain, for the relief and spiritual comfort of Rom. Cath. captives and Christian travellers; but it was deserted by the monks, previously to the accession of the late emperor, Muley Soliman. The inhabitants are described as being courteous and hospitable to strangers, to invite them to their gardens, and entertain them sumptuously. The women are beautiful, and have fair complexions, with black eyes, white teeth, and dark hair; and have a suavity of manners rarely to be met with even in the most polished nations of Europe.

MERDIN (an. *Marde*), a city of Asiatic Tur-

Digitized by Google

key, at the NW. extremity of the pach. of Bagdad, 50 m. SE. Diarbekir, lat. 37° 19′ N., long. 4° 20 E. Pop. estimated at 11,000, of whom 1,500 are Armenians, and 200 Jews. It is situated on the slope of the Karadja-dagh, or ancient *Mount Masius*, and overlooks a very extensive and fertile tract of country. It is commanded by a castle, crowning the summit of a rock, and is very difficult of access, the best road to it leading up a steep about 1½ m. in length. The houses are all built of hewn stone, and appear to be very old; the windows are small, grated with iron, the streets narrow, and the buildings, being on an acclivity, seem to rise one on the top of the other. The walls are kept in tolerable repair, and a few old pieces of cannon are mounted on the towers of the castle. Merdin is the frontier town of the pachalic towards Constantinople, and the residence of a mutzellim appointed by the pacha. The industry of the inhabs. is confined to the manufacture of cotton fabrics and Turkey leather; but it has little external trade, in consequence of not being on any of the great caravan-routes. The neighbourhood produces an abundance of cotton, grain, and fruits, which find a ready sale in the market of Merdin.

MERE, a small market town and par. of England, co. Wilts, hund. its own name, 20 m W. Salisbury, and 96 m. W. by S. London. Pop. of par. 2,929 in 1861. Area of par. 7,400 acres. The town is very indifferently built, having in its centre an ancient cross, the interior of which serves as a market-house. The church is large, with a square tower at its W. end: the living is a vicarage in the gift of the dean of Salisbury. The Wesleyan Methodists support a place of worship and Sunday school. There are a few manufactures, but the town (formerly of considerable importance, having a castle on an adjacent eminence) is now in a miserably decayed condition.

MERGUI, a town of the Tenasserim coast, in India-beyond-the-Brahmapoutra, cap. of the British prov. of Mergui, on the river Tenasserim, at its mouth, in lat. 12° 12′ N., long. 98° 25′ E. Pop. estimated at from 6,000 to 7,000, including natives and British residents, with Chinese, Siamese, Peguans, and descendants of Portuguese. It is built along the declivity and skirts of a steep hill, and, when taken by the British, was surrounded by a wooden stockade. But it is not a place of any strength, being accessible to ships, and commanded by a high island in front. The streets are wide, but badly paved, and they would be much filthier than they are but for the situation of the town on a slope, which facilitates their being cleaned by the rain. The houses are nearly all of bamboo, reeds, matting, and other fragile materials. A mean brick gateway stands at the entrance to the town from the river side, which, with some bastions at the angles of the works, a few small pagodas, and some houses erected by Europeans, are the only structures of any solidity. The harbour is safe for small vessels, having 12 ft. water over the bar at low water, with 18 ft. rise at springs. The climate is mild and salubrious: European invalids, sent thither from Rangoon, speedily recover their health. Mergui was taken by storm by the British in 1824.

MERGUI ARCHIPELAGO. (See TENASSERIM PROVINCES.)

MERIDA (an. *Augusta Emerita*), a town of Spain, in Estremadura, on the N. bank of the Guadiana, 29 m. E. Badajoz, and 176 m. NE. Madrid. Pop. 5,490 in 1857. The town is situated close to the river, on a slight eminence, in the midst of an open and gently undulating country, naturally very fertile, but almost uncultivated, and unhealthy in summer. Its chief public buildings are two par. churches, eight ruined monasteries, two hospitals, and a prison. It is one of the most decayed towns in the peninsula, and wholly unimportant except for its antiquities. But the remains of the power and magnificence of its Roman masters render it an object of great interest. These are scattered in all directions: in the walls, the houses, the churches, and even in the pavement of the streets are discovered fragments of columns, bases, capitals, friezes, statues, and inscriptions. Similar vestiges, and in a more perfect condition, are to be seen in the suburbs. The principal ruins comprise an amphitheatre (used also as a naumachia), circus, theatre, triumphal arch, and baths. The seats of the amphitheatre appear quite perfect; the vaulted dens for the beasts are uninjured; and the conduits by which the arena was filled with water are still distinctly visible. In one of the streets may be seen a large triumphal arch, 150 ft. high, but without any inscription or sculptures. The baths are surprisingly perfect, but not large; and round the top of the bathing-rooms runs a cornice of most curious and delicate workmanship, almost as perfect as if it had recently been executed. The bridge over the Guadiana is of stone, and portions of it may be of Roman architecture; but the greater part of the Roman bridge was swept away by a flood in 1610, and the present bridge has been constructed since. Two arches of this structure were blown up, in 1812, by the British troops under the Duke of Wellington. There are likewise two aqueducts, one of Roman, and the other of Moorish architecture, of brick and granite, the former having three, and the latter two tiers of arches.

Augusta Emerita was founded by order of Augustus, *anno* 25 B. C., who planted in it some of his veterans, called *emeriti*, whence its ancient and modern names. Though its ancient magnitude appears to have been greatly exaggerated, it was, no doubt, one of the largest Roman cities in the peninsula, and became the metropolis of Lusitania. From the Romans it passed, in 713, to the Moors, who destroyed and altered many of its old buildings. In 1228 it opened its gates to Alphonso IX., after his signal victory over the Moors in the contiguous plain of Mantanzas; and, from this period downwards, it has been attached to the kingdom of Castile and Leon.

MERIDA, a town of S. America, repub. Venezuela, dep. Zulia, cap. the prov. Merida, on the Chama, 330 m. SW. Caraccas, and 325 m. NE. Bogota. Previously to 1812, when it was destroyed by an earthquake, this was the largest city in Venezuela, and had a pop. of 12,000. It continued, for some years, to be little better than a heap of ruins; but it has been again rebuilt, and its pop. was estimated at 14,000 in 1860. The town has a cathedral, several chapels, an ecclesiastical seminary, and a college for philosophy and civil law. The inhab. dye wool and manufacture carpets and other woollen and cotton fabrics.

MERIONETH, or MERIONYDD, a marit. co. of N. Wales, having N. the cos. of Caernarvon and Denbigh, E. and S. those of Montgomery and Cardigan, and W. St. George's Channel. It is of a triangular shape, and contains 602 sq. m., or 385,291 acres. Merioneth, next to Caernarvon, is the most mountainous co. in the principality. Among the principal summits are those of Arran-Fowdy, Cader-Idris, and Arrenig; respectively 2,955, 2,914, and 2,809 ft. above the sea. It has, however, some fine vales, especially that of Festiniog, celebrated for its romantic scenery. There are some considerable tracts of low swampy land

Digitized by Google

along the sea coast: and in parts considerable tracts have been gained by embankments. The soil, generally speaking, is poor, and suited only for pasturage. Oats is the grain principally cultivated, but wheat and barley are also raised, though in no great quantities. Agriculture is in a backward state; little or no attention is paid to a rotation of crops; and it is a frequent practice here, as well as in Denbigh, to burn the surface for manure. In some parts of the co. potatoes are extensively cultivated. The principal dependence of the farmer is, however, on his cattle and sheep; of which great numbers are fed on the mountains and in the valleys not fitted for husbandry. The small native Welsh ponies, called *Merlins*, are now rarely met with, except in this co. and Montgomery. They are sure-footed and exceedingly hardy. Dairy farming is carried on to a considerable extent. Farms usually small; and being mostly held at will, without any conditions as to management, the low state of agriculture need not be wondered at. Speaking generally, the cottages are wretched in the extreme, though they have been a good deal improved in some parts of the co. The minerals are of little consequence; lead and copper are raised, though in small quantities; large quantities of lime are produced at Corwen, and slates are quarried in different places. The manufactures, which are unimportant, consist principally of coarse flannels, produced on the domestic system, at Dolgelly, Towyn, and a few other places. The Dee has its source in this co.; and it is also watered by the Dyfi, Maw, and Disynwy, flowing W. Bala, the largest lake in the principality (see BALA) is in this co. Harlech is the co. town. Merioneth is divided into 6 hundreds and 37 parishes. It sends 1 mem. to the H. of C. for the co. Registered electors, 1,527 in 1865. At the census of 1861, Merioneth had 8,499 inhabited houses, with 38,963 inhabitants, while, in 1841, the co. had 8,480 inhabited houses, and 39,332 inhabitants.

MERSEBURG, a town of the Prussian dom., prov. Saxony, cap. reg. Merseburg, on the Saale, 56 m. SSE. Magdeburg, on the railway from Halle to Weimar. Pop. 13,340 in 1861. The town is walled, and is old and irregularly built. It has several suburbs, a cathedral, a castle, a gymnasium, a hospital, and various other public institutions. Merseburg is the seat of government for the regency, of the council and court of justice for the circle and town, and a board of forests; and has manufactures of woollen and linen cloth, paper, tobacco, and vinegar. The beer of Merseburg is celebrated as the best in Saxony.

MERSEY, a river of England, which has its embouchure on the W. coast of the island, in the Irish Sea. Though not large, the Mersey has, from its flowing through the principal manufacturing district of the empire, and giving its name to the gulf or estuary between Lancashire and Cheshire, become, in point of commercial importance, second only to the Thames. It has its sources in the great central ridge, or Pennine chain, on the confines of Yorkshire, Cheshire, and Derbyshire. After receiving the Goyt from the S., and flowing W. through Stockport, it is joined by its important affluent the Irwell. The latter, which has its source in the Lancashire moors, near Haslingden, flows S. through Bury to Manchester, where, being joined by two smaller streams, it takes a westerly course, till its confluence with the Mersey. After being still farther increased by the Boden from Macclesfield, the Mersey passes Warrington, a little below which it expands into a magnificent estuary, having the great commercial port of Liverpool on its N. side, near its junction with the Irish Sea. The Mersey and Irwell have been rendered navigable from Sankey Bridge to Manchester; and in recent years great progress has been made in improving and deepening the navigation.

MERTHYR-TYDVIL, a parl. bor., market town, and par. of S. Wales, co. Glamorgan, hund. Caerphilly, on the Taff, 19 m. N. by W. Cardiff, 140 m. W. by N. London by road, and 189 m. by Great Western and Taff Vale railway. Pop. of parl. bor., which includes nearly all the par. of Merthyr-Tydvil, and the entire par. of Aberdare, with a small portion of the par. of Vainor, 83,875 in 1861. The town lies on the E. side of the valley, down which the Taff descends to Cardiff, scattered in detached masses about the valley and on the hills, sending forth branches in different directions; and fresh groups are continually rising in the neighbourhood of the great iron-works, so that it is somewhat difficult to point out where any collection of houses ends or begins. The houses, generally speaking, are mean looking, but in the centre of the town there are three respectable streets, forming a triangle, at one point of which is the parish church, a modern and well-built structure. Among the other principal buildings are three churches and about twenty chapels, five schools, and a large workhouse. There are numerous Sunday schools, which give religious instruction to 6,000 children of both sexes. National, Lancastrian, and other subscription schools, have likewise been formed, and are well attended. A philosophical society and several book-clubs have been established; and there is abundant proof that education is advancing among all classes. In the environs are many handsome seats, belonging to the wealthy iron masters; and 3 m. N. of the town, on an insulated hill, stand the ruins of Morlais Castle, a very ancient building, demolished during the civil wars.

The rise of Merthyr has been very rapid. Towards the middle of last century it was an insignificant village: in 1755, the lands and mines for several miles round the village, the seat of the great works now erected, were let for 99 years for 200*l.* a year. The modern town is wholly indebted for its prosperity to its rich mines of coal, iron-ore, and limestone. The stratum of coal, which is of excellent quality, is accompanied by parallel veins of argillaceous iron, penetrating to a great depth, and yielding, at an average, about 35 per cent. of metal. The iron works are on a vast scale; those of Sir John Guest and Co. at Dowlais, of the Messrs. Crawshay at Cyfarthfa and Hirwain, having actually raised up very populous townships; the Pen-y-darran and Plymouth iron-works are also very extensive. In all, about 200,000 tons of iron a-year are produced in the immediate vicinity of the town. Of this a large proportion goes through the various processes of refinement and rolling into bars, previous to being shipped at Cardiff. The furnaces, refineries, and rolling-mills employ a great many persons; the wages for men ranging from 12*s.* to 60*s.*; of women from 6*s.* to 10*s.*; and boys 7*s.* to 11*s.* per week. The trade is of a very fluctuating character, and great numbers of workmen are often thrown out of employment by the stoppage even of 2 or 3 furnaces. Distress, however, is less permanent here than in many other districts, as the work is one requiring less experience than many other manufactures; so that a demand for labour is readily met by a supply; while, on the other hand, the labourers feel no great reluctance to transfer themselves to fresh employments.

The communication with Cardiff is effected by means of the Glamorganshire Canal (completed in

Digitized by Google

1794), which commences at Merthyr, and ends, after a course of 25 m., in the tideway of the Taff, near its entrance into Penarth harbour, the entire descent being 611 ft., and by the Taff Vale railway. (See CARDIFF.) The railway connecting the mining district of Merthyr and Aberdare with Cardiff has given a fresh stimulus to the trade of the former, by facilitating the shipment of coal and iron.

The Reform Act created Merthyr a parl. bor., with the privilege of sending *one* mem. to the H. of C.; the electoral limits comprising the par. of Merthyr-Tydvil, except parts of the hamlets of Forest and Taff and Cynon, the entire parish of Aberdare, and the hamlet of Cefn-Coed-y-Cumner, in the par. of Vainor. Registered electors, 1,317 in 1865. Merthyr is also one of the polling places at elections for the co. Petty sessions are held here for the upper div. of hund. Caerphilly; and a court of requests sits monthly for the recovery of debts not exceeding 5*l*. An act was passed in 1830 for the better security of life and property in this district; and the three pars. of Merthyr-Tydvil Aberdare, and Gellygare are under the superintendence of a stipendary police magistrate, having a salary of 600*l*. a year, half of which is levied on the furnaces within the limits of his jurisdiction, and half on the inhabitants of Merthyr alone. Markets on Wednesday and Friday; cattle fairs May 14, 1st Monday in July, and 1st Monday in August.

MESAGNE, or MESSAGNA, a town of Southern Italy, prov. Lecce, cap. canton, 8 miles SW. Brindisi. Pop. 7,735 in 1862. The town has several convents, a hospital, and a fine palace, belonging to the Francavilla family. It manufactures kitchen utensils, and has some trade in oil and grain, considerable quantities of which are grown in its vicinity. Mesagne is supposed by many Italian authors to be the representative of the an. *Messapia*, but this is doubtful.

MESHED, a city of Persia, the cap. of Persian Khorassan, and esteemed as 'holy' from its containing a very superb sepulchre, enclosing the remains of Imâm Reza and the caliph Haroun al Raschid; 455 m. E. by N. Teheran; lat. 36° 17′ 40″ N., long. 59° 35′ E. Pop. estim. at 50,000. It stands in a rich and well-watered plain, is surrounded with a strong wall, and is divided into 12 quarters, of which 5 are in ruins. The houses are meanly built of sun-dried bricks, and the ark or palace is unworthy of its name. There were formerly 16 medressas or colleges, but most of them are either deserted or in ruins. The city has now little worth notice, except its fine and well-supplied bazaar, and the mausoleum of Imâm Reza, the magnificence of which, with its silver gates, jewelled doors, rails once of solid gold, glittering domes and minarets, and handsome arcades, is almost unequalled in Persia. It has, however, been often plundered, and its resources are greatly reduced. Meshed carries on a considerable trade with Bokhara, Balkh, Candahar, Yezd and Herat; and many of the inhabs. are employed in weaving velvet and making fine pelisses, both of which are much esteemed throughout Persia.

MESSINA (an. *Zancle* and *Messana*), a celebrated city and sea port of Italy, island of Sicily, cap. of prov. of same name, near the NE. extremity of the island, on the strait of its own name, 56½ m. NNE. Catania, and 120 m. E. by N. Palermo, with both which towns it is connected by railway. Pop. 100,447 in 1862. The city has a most imposing appearance from the sea, forming a fine circular sweep, about 2 m. in length, on the W. shore of its magnificent harbour, from which it rises in the form of an amphitheatre; and, being built of white stone, it strikingly contrasts with the dark forests that cover the mountains in the background. Prior to 1783, the harbour was fronted by a magnificent terrace of lofty houses called the *Pallazzata*, having in front a broad quay decorated with statues and fountains. But the great earthquake of that year laid the city almost entirely in ruins, and though the terrace still exists, it is shorn of its former grandeur. The quay in its front, called the *Marina*, has now, as formerly, numerous fountains, and is the favourite promenade. Ruined buildings, and other vestiges of the earthquake, are still to be seen in some parts of the city, and few houses have now more than two stories. The modern city is regularly built, well paved with square blocks of lava, and several of its streets are wide and handsome, ornamented with numerous churches, convents, statues, and fountains. The square in front of the cathedral, and that of *San Giovanni di Malta*, are both well built and handsome. The fountain in the centre of the former ranks with the finest in Sicily. The cathedral, erected soon after the conquest of Sicily by the Normans, has been repeatedly damaged by earthquakes. It is a Gothic building, with a heavy and gloomy exterior; the interior, though devoid of taste, is richly ornamented. The principal entrance is handsome; and the nave is supported by immense granite columns taken from the ruins of a temple of Neptune. The great altar and the roof of the choir are set off with mosaics and precious stones: the carved work of the pulpit is said to be a *chef d'œuvre* of the Sicilian sculptor Gaggini. The church of Monte Virgine has some good paintings in fresco, and that of St. Giorgio is very rich in marbles and inlaid work, and has some tolerable pictures. Adjacent to the governor's palace a noble building at the S. extremity of the city, is a large open space planted and laid out in public walks. The other public buildings include a large hospital, several asylums of various kinds, 2 theatres, town-hall, exchange, bank, and college. Messina is surrounded by an old irregular wall, finished by Charles V. The citadel, a pentagonal fortress, erected on the S. side of the harbour, is constructed according to the principles of Vauban; but though well provided with bomb-proof quarters and stores, it is badly situated and commanded in almost every part. Two strong and well-built forts have, however, been constructed on eminences above. The town is further defended by a fort placed so as to command the mouths of the Fiumare, which are the only places where an enemy could land with cannon.

The port, to which Messina is wholly indebted for her prosperity, is formed by a lengthened curved tongue of land, that might be supposed to be an artificial circular mole, projecting first NE. from the main land, and then bending round to the W. in the form of a sickle. The entrance on the N., about 700 yards across, is defended on the W., or main-land side, by the bastion of Porto Reale, and at the extremity of the curved promontory by Fort Salvatore. A light-house has been constructed on the extreme E. verge of the promontory. The basin thus enclosed is about 4 m. in circuit, and, having deep water throughout, is capable of accommodating the largest fleets: it is, in fact, not only the finest harbour in the Mediterranean, but one of the finest in the world. Men-of-war moor in the centre of the basin in about 35 fathoms, but merchantmen lie alongside the quay, and have every facility for loading and unloading. The pratique-office, the fish-market, and the custom-house are all on the Marina. The lazaretto, the best establishment of the kind in Sicily, is in the E. angle of the har-

Digitized by Google

bour. The trade of Messina is very considerable. Her exports consist principally of oranges and lemons, olive oil, silk, linseed, wines and spirits, shumac, liquorice, rags, corn, and salted fish. Almost all the silk exported from Sicily is shipped here. The imports consist of colonial produce, and cotton and woollen fabrics, hides, and hardware. The following statement gives the total value of both the imports and exports in each of the years 1860 to 1864.

Years	Imports	Exports
	£	£
1860	808,489	915,996
1861	916,086	910,794
1862	681,390	889,055
1863	732,542	871,111
1864	884,298	986,738

In the year 1864, there entered the port 311 British vessels, of a total burthen of 105,918 tons, and with cargoes the invoice value of which was 265,300*l*. (Report of Mr. Rickards, British Vice-Consul, dated Messina, May 1, 1865.)

Messina is the see of an archbishop, and the residence of a Greek *protopapas*, with authority throughout Sicily, but who is nominated by the pope. It is the seat of a royal court of appeal, and of criminal, civil, and commercial tribunals; and has a municipal bank, several *monti di pietà*, or government loan banks, and other benevolent institutions. Next to commerce, its inhabs. are chiefly occupied in the tunny and other fisheries; and in the manufacture of silk stuffs, especially damasks and satins. It has an ecclesiastical seminary, a lyceum, a royal college for law and medicine, and an extensive public library; but Messina has made slow progress in refinement, compared with Catania or Palermo.

The accounts of the origin and early history of Messina differ considerably. It is admitted on all hands to be very ancient; and most probably derived the name it has so long borne from a settlement having been made in it by a body of emigrants from Messene, in Greece. Having been seized by the Mamertini, it became, under them, one of the most populous, wealthy, and powerful cities of Sicily. It was the first town of the island that came into the possession of the Romans. (Cellarii Orbis Antiqui, i. 973.)

The principal political events in the history of Messina, in modern times, are its successful resistance to Charles of Anjou, by whom it was besieged, after the Sicilian Vespers; and its revolt against the Spaniards in 1674, followed, in the ensuing year, by the defeat of the latter in its vicinity by a French force. In 1743 the plague broke out in Messina, with the most destructive violence, sweeping off the greater number of the inhabs.

METZ (an. *Divodurum*, afterwards *Mediomatrici* and *Metis*, whence its present name), a strongly fortified city of France, dép. Moselle, of which it is the cap., at the junction of the Moselle and Seille, 80 m. WNW. Strasbourg, and 180 m. ENE. Paris, on the railway from Luxembourg to Strasbourg. Pop. 56,883 in 1861. Metz is a fine old city; but, like most fortified places, the streets are narrow and the houses lofty. Near the river it is more open, the quays are broad, and the bridges magnificent. The river is clear and rapid, and swells to an expanded stream, where not confined by the embankments, as it is within the fortifications. Metz was fortified by Marshals Vauban and Belleisle; it has several strong outworks, and a citadel on the Moselle; but the latter was partly dismantled during the Revolution, and its esplanade has been laid out in public walks, which command a fine view of the valley of the Moselle and its bounding hills. The city has 9 gates and drawbridges, but only 6 are in use. The most conspicuous public building is the cathedral, a vast pile, commenced in 1014, but not finished till 1546. It is about 390 ft. in length, the height of the nave being about 140 ft., and that of the tower about 400 ft. The latter, which is a fine specimen of Gothic architecture, has in it a bell weighing 26,000 lbs. The whole edifice is remarkable for lightness. The military hospital, built in the reign of Louis XV., is a noble edifice, consisting of two ranges of building, and capable of easily accommodating 1,500 patients. The *Hôtel du Gouvernement*, a large though rather heavy fabric, fronts the esplanade; it is appropriated to the courts of justice and the city library; the latter has above 30,000 vols., among which are numerous works printed in the 15th century, and about 800 MSS., some of the 10th century. The barracks, military magazines, prefecture, town-hall, and mint, several of the churches, the new market, the theatre, with a portico of the Tuscan order, are among the other edifices. The Moselle and the Seille, in and near the city, are crossed by at least 20 bridges. The principal school of artillery and military engineering (*École de Génie*, or *d'Application*) in France is established here. Its library has a choice collection of about 10,000 vols. of military and scientific works, with sundry MSS. of Vauban and other distinguished persons. Exclusive of the above, Metz has two other public libraries, with several convents and charitable asylums, a Protestant church, a synagogue, a royal college, a university academy, an ecclesiastical school, and other seminaries; a school for the fine arts, a royal society of arts and *belles lettres*; an agricultural society, a society for the encouragement of primary instruction, and collections in natural history, mineralogy, and chemistry; a botanic garden, a lying-in hospital, and a savings' bank.

Metz, is the see of a bishop, and the seat of a royal court, for the dépts. of Moselle and Ardennes, and of tribunals of primary jurisdiction and commerce, and a chamber of commerce, and the headquarters of the third military division of France. It is also a manufacturing city, in which are made woollen goods of various kinds, hosiery, cotton goods, table-linen, printed paper, musical instruments, starch, and gunpowder: it has, besides, several extensive tanneries. Much trade originates here from the produce of the vines, some portion of which is converted into wine, but more into brandy and vinegar; and Metz is celebrated for the preparation of various kinds of confectionery. It is encircled by hills, covered from the bottom to the top with fruit-gardens and vineyards. The vineyards are mostly in small divisions, and principally cultivated by small proprietors, who are extremely poor, and almost all involved in debt to the capitalists of the city, who take from them their wine, brandy, and vinegar as soon as it is made. Metz has also a cannon foundry, a salt-petre refinery, and produces leather, cotton yarn, military and other hats, muslins, beet-root sugar, chicory, nails, and other articles of hardware, cutlery, buttons, and glue.

This is a very ancient city. It still possesses several ruins belonging to the Roman period, among which are the remains of an aqueduct, that appears to have conveyed water to a *naumachium* near the S. extremity of the city. The site of the latter is now occupied by outworks belonging to the fortifications. Parts of an amphitheatre and of a Roman palace are still traceable in the city.

Digitized by Google

It suffered considerably, about *anno* 70, from some excesses of the troops of Vitellius (Taciti Hist., lib. i. cap. 73), and was nearly destroyed by the savage barbarism of Attila in 452. It had, however, recovered a large portion of its former prosperity in the Middle Ages, and became the cap. of the kingdom of Austrasia. From the 11th century to 1552, when it was taken by Henry II., it was an independent flourishing city. In the same year that it was taken by Henry, it was besieged by the emperor Charles V., with an army of 100,000 men, but the Duke of Guise successfully defended the town, and Charles was obliged to relinquish the siege. It was finally annexed to the French crown by the treaty of Westphalia, in 1648.

MEURTHE, a dép. of France, reg. N.E., formerly part of the prov. of Lorraine, between lat. 48° 20′ and 49° N., and long. 5° 40′ and 7° 20′ E., having N. the dép. Moselle, E. Bas Rhin, S. Vosges, and W. Meuse. Length, E. to W., 74 m.; average breadth, about 35 m. Area, 609,004 hectares; pop. 428,643 in 1861. The Vosges mountains run through the E. part of the dép., the surface of which is mostly covered with their ramifications, though these rise to no great elevation. The dép. belongs almost wholly to the basin of the Moselle, which river intersects its W. part from S. to N., and is joined, within its limits, by the Meurthe. The latter rises in the dép. Vosges, runs generally in a NW. direction, and, after a course of between 70 and 80 m., unites with the Moselle about 5m. below Nancy, to which it is navigable. Besides Nancy, St. Dié and Luneville are on its banks; and it receives the Mortagne, Vezouze, and Mezulle. The Seille and Sarre are the other chief rivers of the dép. There are numerous small lakes, one of which occupies an area of 622 hectares. It is estimated that 303,636 hectares of the surface are arable, 71,851 in pasture, 16,371 in vineyards, 116,209 in woods, and 6,236 in orchards. The land is very unequal in point of fertility, and is very indifferently farmed; but more corn is grown than is required for home consumption. Before the Revolution, the culture of the vine was limited to the declivities of hills with a southern aspect; but its culture has since been very much extended, the quality of the produce being less regarded than the quantity. About 550,000 hectolitres of wine are supposed to be produced annually, of which the greater part is consumed in the dép. The wines are generally inferior, though the growths of Pagny, Thiaucourt, Arnaville, Baudonville, and others, may be classed among the secondary qualities of *vins ordinaires*. Dried plums and preserved apricots form important articles of commerce; and the forests, which are more extensive than in most dépts., furnish a good deal of timber. The pastures are naturally good, but receive little attention from the farmer. There are estimated to be 84,000 head of black cattle, and 167,000 sheep in the dép., but both are of indifferent quality. The breed of horses has been improved by the fine stud of Rosières. Hogs of an improved breed are numerous, and their flesh and lard are sent to distant parts of France. A great many poultry are reared. Property is much subdivided. Turf and lime are among the chief mineral products; there are some quarries of marble and alabaster, and a few iron mines; but the latter have been abandoned. The salt mines and springs at Dieuze, Vic, and Moyenvic yield about 45,000,000 kilogr. of salt, and 1,000,000 do. of soda a year. About 22,000 hands are employed in the manufactures of cotton cloth and yarn, woollen stuffs, glass, and earthenware, and in embroidery, dyeing cotton stuffs, and tanning. At Baccarat is a large glass manufactory, employing a great many hands.

Meurthe is divided into 5 arronds.: chief towns, Nancy the cap., Toul, Château-Salins, Sarrebourg, and Luneville.

MEUSE, a dép. of France, reg. NE., formerly part of the prov. of Lorraine, chiefly between lat. 48° 25′ N., and 49° 35′ N., and long. 5° and 6° E.; having N. Dutch Luxemburg and the dépts. Ardennes and Moselle, E. Moselle and Meurthe, S. Vosges and Haute Marne, and W. Marne and Ardennes. Length, N. to S., 80 m.; breadth, about 40 m. Area, 622,787 hectares; pop. 305,540 in 1862. Surface generally hilly, the hills being ramifications of the Vosges and Faucilles mountains, with an average height of from 1,000 to 1,300 ft., though they sometimes reach an elevation of 1,600 ft. The Meuse traverses the dép. in its entire length; the other principal rivers are the Ornain, Chiers, and Aire. The plateau, in the E., separating the basins of the Meuse and the Moselle, and other portions of the surface, are not very productive; but there are, notwithstanding, about 225,000 hectares of rich soil in the dép., chiefly in the valleys of the Meuse and Ornain. It is estimated that 335,190 hectares are arable, 49,472 do. in meadows, 13,540 do. in vineyards, 7,387 do. in orchards, and 137,755 do. in woods. Potatoes, oleaginous plants, hemp, and flax, are among the other articles of culture. Gooseberries are extensively cultivated in the gardens round Bar and Ligny, and enter largely into the confectionery, for which those towns are celebrated. The produce of wine is estimated at about 400,000 hectol. a year. The wines of Bar-le-Duc, Bussey-la-Côte, Preue, and Ligny are delicate light wines, ranking in the first class of *vins ordinaires*; but they do not keep above two years, and do not bear carriage. Along the Meuse are rich pasture lands; and at Void, cheese, similar to that of Gruyère, and excellent butter are made. A good many cattle and sheep are reared in the dép., but live stock is in general indifferent. The produce of wool is estimated at upwards of 140,000 kilogr. a year. Iron, slates, and good building-stone are the chief mineral products. There are between 20 and 30 iron furnaces (*hauts fourneaux*) in the dép.; and the establishments at Thounelle and Stenay produce each about 1,500,000 kilogr. of iron a year. About 500,000 kilogr. a year of cotton yarn are made at Bar-le-Duc, which, also, has fabrics of paper and glue, and is the *entrepôt* of a large trade in timber from the forests of the dép. There are numerous glass-works, with lime-kilns, potteries, and beet-root sugar factories. Many working cutlers, shoemakers, and other artisans, emigrate for a part of the year from this into other parts of France, and even to the adjacent foreign countries, with the products of their industry, or in search of employment. Meuse is subdivided into four arronds.; chief towns, Bar-le-Duc, the cap., Commercy, Montmédy, Verdun.

MEUSE or MAESE (Dutch *Maas*, an. *Mosa*), a river of W. Europe, flowing through the NE. part of France, Belgium, and the S. of Holland; its basin being situated between those of the Marne and Scheldt to the W., and of the Moselle to the E. It rises in the dép. of Haute Marne, in France, 10 m. NE. Langres, in about lat. 48° N., long. 5° 20′ E., and runs at first generally N. through the dépts. of Haute Marne, Vosges, Meuse, and Ardennes. Near Charlemont it leaves France, but it continues its previous direction to Namur, where it receives the Sambre from the West. It here makes a sudden bend to the NE., in which direction it continues through the provs. of Namur, Liege, and Limburg, to about lat. 51° 30′ N. It

Digitized by Google

afterwards curves to the W., flowing between N. Brabant and Guelderland; and finally at Woudrichem, in lat. 51° 49′ and long. 5°, enters the Rhine or Waal, which loses its own name to assume that of the Maas. (See RHINE.) Its entire course may be estimated at 400 m., nearly the half of which is in France. It is navigable for three-fourths of this extent, or as far as Verdun, dép. Meuse. Its chief affluents are the Bar in France; the Lesse, Sambre, and Ourte in Belgium; and the Roer and Niers in the Netherlands. Proceeding from its source to its mouth, the chief cities and towns on its banks are Neufchâteau, Verdun, Sedan, Mezières, Charlemont, and Givet in France; Dinant, Namur, and Liège in Belgium; and Maestricht, Roermond, Venloo, and Grave in Holland, before its junction with the Rhine.

The Meuse communicates with the Aisne, and thence with the Seine and Somme by the canal of Ardennes; with the Scheldt, by means of the Sambre and the Charleroi canal; and with both the Scheldt and the Rhine by the various branches of the Great North Canal.

MEXICO (EMPIRE OF), a state of N. America, lying between the 15th and 33rd parallels of N. lat. and 97° and 113° W. long., being bounded NE. and N. by the W. districts of the United States of N. America, including New California, E. by the Gulf of Mexico and the State of Texas, S. by Guatemala, and W. and SW. by the Pacific Ocean. The line dividing Mexico from Texas commences with the Rio Grande del Norte, which it follows up to the 32nd deg. of lat. and the 105th deg. of long., whence it stretches NW. till it joins the Gila, an affluent of the Colorado, and then W. till it reaches the Pacific in about 32½ deg. lat. The line of separation on the side of Guatemala is very irregular, running along the N. side of British Honduras, Vera Paz, and Guatemala, till it joins the Pacific on the SE. side of the Gulf of Tehuantepec. No accurate census of the population has ever been made, and the area of the country and number of inhabitants are only known through estimates. The most reliable of these, based on partial enumerations made by the government at the two periods of 1837 and 1857, state the population of the nineteen provinces, together with the city of Mexico, as follows:—

States	Extent in Square Miles	Population in 1837	Population in 1857
Chiapas	18,750	92,000	167,472
Chihuahua	107,500	190,000	164,073
Cohahuila	193,600	90,000	62,109
Durango	54,500	150,000	144,331
Guanaxuato	8,000	500,000	729,103
Mexico	35,450	1,500,000	1,029,629
Michoacan	22,466	460,000	554,585
New Leon	21,000	100,000	213,369
Oaxaca	32,650	660,000	525,938
Puebla	18,440	900,000	558,609
Querétaro	7,500	100,000	165,155
San Luis Potosi	19,000	300,000	397,189
Sonora and Sinaloa	254,700	300,000	329,374
Tabasco	14,676	75,000	70,628
Tamaulihas, or New Santander	35,100	150,000	109,673
Vera Cruz	27,660	150,000	349,125
Xalisco	70,000	870,000	90,158
Yucatan	79,500	570,000	668,623
Zacatecas	19,950	200,000	296,789
City of Mexico	—	200,000	269,534
Total	1,030,442	7,557,000	7,995,426

Of this great tract of country, which is about one-third as large as Europe, the portion lying S. of the tropic of Cancer, and comprising a large part of the long and narrow isthmus that connects the American peninsulas, and separates the Atlantic from the Pacific Ocean, is by far the most populous and rich, both in mineral and vegetable productions. The regions N. of the tropic become less populous in proceeding northward; and many districts are almost unknown, being inhab. only by wild Indian tribes, baffling all the attempts of their nominal masters to civilise or subdue them.

The surface of Mexico is extremely varied; and to this circumstance, nearly as much as to the difference of latitude in so extensive a country, may be attributed that singular variety of climate by which it is distinguished from most other regions. The Cordillera, or chain of mountains, generally regarded as a portion of the great chain of the Andes, that enters Mexico on the S., where it borders with Guatemala, diverges, as it proceeds N., into two great arms, like the upper part of the letter Y, following the line of the coasts on either side. The most westerly of these chains, or that parallel to the shores of the Pacific Ocean, has some very high summits, and preserves its mountainous character till it joins, on the border of the United States, with the Oregon, or Rocky Mountains. The other, or eastern arm of the Cordillera, begins to subside after reaching the 21st or 22nd deg. of lat., and ultimately subsides, about the 26th or 27th deg. of lat., into the vast plains of Texas. The whole of the vast tract of country between these two great arms, comprising about three-fifths of the entire surface of the empire, consists of a central table-land, called the plateau of Anahuac, elevated from 6,000 to upwards of 8,000 ft. above the level of the sea. Hence, though a large portion of this plateau be within the limits of the torrid zone, it enjoys a temperate climate; inclining, indeed, more to cold than to excess of heat. Some very high mountains are dispersed over the surface of the central table-land; and it is also traversed in parts by well defined ridges, which divide it into extensive sub-plateaus, to which different names have been given. But the surface is interrupted by few transverse valleys; and in some directions it is quite unbroken, either by depressions or by hills. Thus, it is mentioned by Humboldt, that carriages proceed from the capital, in the centre of the plateau, to Santa Fé, in New Mexico, a distance of 1,400 m., without any important deviation from an apparent level. (Essai sur la Nouvelle Espagne, i. 254.) The most remarkable tract in this elevated region is the plain of Tenochtitlan (in which is the cap.), surrounded by ridges of porphyritic and basaltic rocks, running SSE. and NNW. It is of an oval form, 55 m. long and 37 m. broad, occupying an area of 1,700 sq. m., of which about 160 sq. m. are covered with water. Its SE. side is that most elevated, and here are seen towering above the plain the volcanoes of Popocatepetl, 17,716 ft., Iztaccihuatl, 15,700 ft., Cittalapetl or Orizaba, 17,380 ft., and Nauhcampapetl, or the Cope de Perote, 13,416 ft. above the sea. The waters of the valley are deposited in five principal lakes situated on different levels; that of Tezcuco, which is near the centre of the valley, and covers 70 sq. m., is the least elevated. Further N. are the lakes of St. Christoval and Tonanitla; while S. is the lake Chalco, occupying an area of 50 sq. m.; and these three are 5 ft. higher than lake Tezcuco. The most elevated, however, of the whole, though the smallest, is the lake Zimpango, the level of which is 30 ft. above that of Tescuco. These lakes are fed by small rivers, and having no natural outlet, are drained by the Desague of Huchuetoca, an artificial canal cut through the rock, 12 m. in length, 150 ft. deep, and 300 ft. wide; having its embouchure in the river Panuco, which flows into

Digitized by Google

the Gulf of Mexico. This great work, completed in 1789, at an expense of 1,292,000*l.*, was undertaken to obviate the frequent inundations, some of which did great damage to the capital. The water of lake Tezcuco is salt, that of the rest is fresh; but from those to the S. sulphuretted hydrogen gas is copiously disengaged, the smell of which is often perceptible at Mexico.

Besides the volcanoes already noticed, those of Tuxtla, Jorullo, and Colima, in the table-land, are at present in a state of activity, and there are several others now extinct. Jorullo, which stands W. of the city of Mexico, first broke out in 1759, when a tract of ground, from 3 to 4 m. square, swelled up like an inflated bladder, emitting flames and fragments of rock through a thousand apertures. These active volcanoes seem to be connected with others parallel to them, and obviously of similar origin. Earthquakes are frequent in Mexico, but they seldom do much mischief.

The geological formation of the Mexican Cordilleras differs considerably from that of the great mountains of Europe and Asia, in which granite is overlaid by gneiss, mica, and clay-slate; for here we seldom meet with granite, as it is covered with porphyry, greenstone, amygdaloid, basalt, obsidian, and other rocks of igneous origin. Granite, however, appears on the surface in the chain bordering the Pacific, and the port of Acapulco is a natural excavation in that species of rock. The great central plateau of Anahuac, between lat. 14° and 20° N., is a mass of porphyry, characterised by the constant presence of hornblende, and the entire absence of quartz; and in it are contained large and valuable deposits of gold and silver. These ores, however, are found in various rocks: in the mines of Comanja rich veins of silver occur in sienite; in those of Guanaxuato, which are the richest in Mexico, the metal lies in a primitive clay-slate passing into talc-slate; and those of Real del Cardonal, Xacala, and Lomo del Toro, are situated in a bed of transition limestone. Humboldt says, that there were at the time of his visit 3,000 mines of gold and silver in Mexico; but the ignorance and misrule which, till within the last few years, prevailed in the country, have greatly diminished their importance as a source of wealth.

Rivers.—Mexico suffers serious disadvantages from the want of water, and the rivers, as compared with the extent of territory, are few and unimportant. The Rio Grande del Norte, indeed, has a course of more than 1,300 m., and the Colorado runs about 700 m. into the Gulf of Mexico. The Rio Grande de Santiago, called by the natives Tolotlan, rises in the centre of Mexico, not far from the capital, and, after traversing the lake Chapala, falls into the Pacific at San Blas. The Balsas, or Zacatula, and the Yopez, are the only other rivers on the W. side of the plateau, and on the E. side are the Tula and Tampico and the Tabasco, flowing into the Gulf of Mexico; but they have bars at their mouths, which prevent the entrance of large vessels. The other rivers are short, and might more properly be called torrents. The lakes are numerous and extensive; and the principal, besides those in the plateau of Tenochtitlan, already mentioned, are Chapala, in Xalisco, which, according to Humboldt, covers an area of 1,300 sq. m.; Pascuara in Michoacan, Mextitlan, Cayman and Parras, the two last being in the tract called the Bolson de Mapimi.

Climate.—The temperature and climate of Mexico are, of course, extremely various; owing, not only to its great extent from N. to S., but also to the rapidity of the slope both on the E. and W. side. The climates, especially on the E. side, are most distinctly marked by the vegetation. On the ascent from Vera Cruz, says Humboldt, climates succeed each other in layers; and the traveller passes in review, in the course of two days, the whole scale of vegetation, from the parasitic plants of the tropics to the pines of the arctic regions. (*Essai Pol. sur la Nouv. Espagne*, i. 270–289.)

Mexico is divided, as respects climate, into the *tierras calientes*, or hot regions, the *tierras templadas*, or temperate regions, and the *tierras frias*, or cold regions. The first, or the *tierras calientes*, include the low grounds, or those under 2,000 ft. of elevation, on its E. and W. coasts, comprising the greater part of the states of Taumalihas, Vera Cruz, Tabasco, and the peninsula of Yucatan, on the former. The *tierras calientes*, on the W. coast, are less extensive, the eastern arm of the Cordillera approaching nearer to the sea. The mean temperature of this region, or, at least, of that portion of it between the tropics, may be estimated at about 77° Fah., being from 14° to 16° above the mean temperature of Naples. It is especially suited for the growth and cultivation of sugar, indigo, cotton, and bananas, which flourish in the utmost luxuriance.

This region labours under the serious disadvantage of being nearly inaccessible by sea for half the year, and of being extremely unhealthy during the other half. The winter, on the E. coast, extends from about Oct. to the vernal equinox; and during this season, in the Gulf of Mexico, N. or NW. winds (*los nortes*) are extremely prevalent, blowing with more or less violence. Frequently, especially in the month of March, the N. winds approach to the strength of a hurricane, and continue to blow with the utmost violence, and without intermission, for 3, and, sometimes, even for 10 or 12 days together. During the whole of this season the navigation of the gulf is exceedingly dangerous; but on shore the heat is moderate, and the coast free from fever and tolerably healthy. However, it so happens, that during the other half of the year, or from the vernal equinox to Oct., when the N. winds are comparatively rare, and the ports are easily accessible, the heat is oppressive, a great quantity of rain falls, and the coast becomes the seat of pestilential fevers. A European arriving for the first time at Vera Cruz, or any other part of the coast between the tropics, in August, September, or October, has but little chance of escaping the *vomito prieto*, or yellow fever; and individuals who have merely landed at Vera Cruz, and proceeded on immediately for Xalapa, have, notwithstanding, caught the infection. The scourge, however, does not extend its ravages beyond the low grounds on the sea-coast; and at the height of 2,000 or 2,500 ft. above the sea it is wholly unknown. The ports of Acapulco and the low grounds along the W. coast are also extremely hot and unhealthy; and, owing to the prevalence of strong gales, approaching to hurricanes, during the months of July, August, Sept., and down to Oct., the navigation is then extremely dangerous.

The *tierras templadas*, or temperate regions, which are of comparatively limited extent, occupy the slope of the mountain chains, or barriers, which bound, on either side, the central table-land. It extends from about 2,500 to about 5,000 ft. of elevation. The mean heat of the year is from 68° to 7° Fah., and the extremes of heat and cold are here equally unknown. The Mexican oak, and most of the fruits and cerealia of Europe, flourish in this genial climate. The cities of Xalapa, on the E., and of Chilpanzingo, on the SW. slope, are in this region, and are famous for their salubrity and for the abundance of their fruit trees. The frequency of fogs, and the consequent humidity of the atmosphere, is the greatest draw-

Digitized by Google

back on the climate of the *tierras templadas*; but this, how injurious soever in some respects, produces great beauty and strength of vegetation.

The *tierras frias*, or cold regions, include all the vast plains elevated 5,000 ft. and upwards above the level of the sea. In the city of Mexico, at an elevation of 7,400 ft., the thermometer has sometimes fallen below the freezing point. This, however, is a rare occurrence, and the winters are there usually as mild as in Naples. In the coldest season the mean heat of the day varies from 55° to 70° Fahr.; while in summer the thermometer seldom rises in the shade above 75°. The mean temperature of the city is about 64°, and that of the table-land generally may be taken at about 62°, being nearly equal to that of Rome. But, wherever the table-land rises to more than 8,000 ft. above the sea, it has, though between the tropics, a rude and disagreeable climate. Under the parallel of Mexico the limit of perpetual snow varies from about 12 to near 15,000 ft. Vegetation in the central plateau is not, owing to the rarity of the air, so vigorous as on the *tierras calientes*, or along the coasts, and the plants of Europe do not succeed so well as in their native soil. In the tropical and central region of Mexico, and as far N. as lat. 28°, there are only two seasons; that of the rains, lasting from July to the middle of Sept., and the dry season, continuing from Oct. to the end of May. From the 24th to the 30th parallel the rain falls less frequently; but this deficiency is compensated by the abundance of snow during Jan. and Feb.

The climate of the table-land is, on the whole, favourable to human life. But, though intermittent fevers be of rare occurrence, the natives are occasionally visited by a peculiar epidemic, called by them the *matlazahuatl*; but it owes its origin more to the habits of the people than any other cause. Indeed, famine, and its concomitant privations, have thinned the pop. more than epidemic complaints. The indolence of the natives prevents all exertions to raise more food than requisite for the wants of a single ordinary season; and no one ever thinks, when there is a surplus, of laying up a stock against future contingencies. Hence, when droughts and severe frosts occur, they are compelled to seek their subsistence in the forests, where roots and wild berries constitute their sole diet; and multitudes are often carried off by hunger and unwholesome food.

Animals.—The zoology of Mexico is but imperfectly known. The domestic animals introduced by the Spaniards have so much increased, that vast herds range wild through these thinly inhabited regions. The wool of the sheep is of inferior quality; but this is attributable more to neglect and mismanagement than to nature: mules are much used in the mining districts. Buffaloes abound in the prairies bordering on the Arkansaw and Red River, and during winter they migrate westward, in quest of pasturage, to the milder climate of the plains along the lower part of the Rio Grande del Norte. Carnivorous animals are not numerous. Bees abound in the low country of Yucatan.

Agriculture.—Mexico, not only from its extent through 21 degrees of latitude, but also from the varying elevation of its surface, and consequent variety of climate, produces most of the plants peculiar to the tropics, as well as those belonging to the temperate regions of S. and middle Europe. 'Indeed,' says Humboldt, 'there is scarcely a plant in the rest of the world which is not susceptible of cultivation in one or other part of Mexico; nor would it be an easy matter for the botanist to obtain even a tolerable acquaintance with the multitudes of plants scattered over the mountains, or crowded together in the vast forests at the foot of the Cordilleras.' (Essai, tom. ii. p. 370.) The soil also is, in most parts, extraordinarily fertile; and wherever water can be procured for irrigation, the most abundant crops may be raised with very little labour. This, however, is very far indeed from being an unmixed advantage; and it is, in fact, more than doubtful, whether a very fertile soil and a genial climate, that makes warm clothing and comfortable lodgings of comparatively little importance, be consistent either with active industry and exertion or with a high state of civilisation. In most parts of Europe, continuous industry is indispensable to existence; but it is otherwise in Mexico; and as it is found that industry is uniformly proportioned to the strength of the motives by which it is occasioned, and that, wherever the ordinary necessaries and comforts of life may be procured with little labour, the mass of the people are invariably indolent. To suppose, indeed, that they should be otherwise, is to suppose what is contradictory and absurd. This effect of the peculiar nature of the soil and climate was less sensible in Mexico under the Spanish government, because it was then daily receiving adventurers from Europe, imbued with European notions, and anxious to accumulate a fortune. But now that the influx of such parties has nearly ceased, and that there are no such extrinsic and adventitious motives to prompt to activity and enterprise, every thing appears to be falling into a state of apathy and languor; and indolence, with its necessary accompaniments of poverty, ignorance, and pride, bid fair to be, for a lengthened period, the distinguishing characteristics of the Mexicans.

All the more useful plants are distributed through the zones into which the country is divided. The banana, which flourishes up to the point where the mean temp. is 75° Fahr., bears the same relation to the Mexicans, in the lower provinces, that the various cerealia bear to the inhab. of Europe and W. Asia, and the different kinds of rice to the Bengalees and Chinese. About 450,000 sq. m. in the *tierras calientes* are said to be adapted for its cultivation. It is propagated by cuttings; and there is probably no other plant which produces on the same extent of land, and with so little labour, so great a quantity of food. Humboldt affirms that ½ hectare (about an acre) of land, planted with bananas, will furnish food for more than fifty individuals; whereas the same extent of land, if sown with wheat, in Europe, would not support more than two individuals. All the labour required to raise this enormous produce is to cut off the stems when the fruit is ripe, and to give the earth a slight digging about the roots of the plant once or twice a year. Hence nothing strikes an European recently arrived in Mexico with more astonishment than the smallness of the patches of cultivated ground round cabins that swarm with children. It cannot be said of such a country:—

'Pater ipse COLENDI
Haud facilem esse viam voluit.'

But the ease with which subsistence may be procured, and the fewness of their wants, have made the natives in the last degree slothful. Indeed, Humboldt tells us that it has been gravely proposed, in order to stimulate their industry, and rouse their torpid faculties, to grub up and destroy the banana plantations. (Essai, ii. 396.) Such a project is, of course, impracticable and absurd; but the nature of the proposed remedy serves, at all events, to show the violence of the disease.

The same parts of the country which produce

Digitized by Google

the banana produce also the cassava, or manioc, the farina of which yields a very nourishing bread: it requires more care than the banana, somewhat resembles the potato, and arrives at maturity about eight months after the slips have been planted. The culture of maize is scarcely less important in the *tierras calientes* than that of the plants before named; it is not confined, however, to the low lands, but ascends as high even as the plain of Toluca (9,100 ft. above the sea), the lowest average temperature favourable to its growth being about 48° Fahr. The plant, under favourable circumstances, rises to the height of 7 or 8 ft., and the returns, in common years, are most abundant; but they are more uncertain than those of any other kind of grain. Maize is the principal food of the people, as well as of most domestic animals; and a deficient harvest, whether from want of rain, or excess of cold, produces a general famine, and compels great numbers of the rural population to seek the deserts in search of wild plants.

There can be no doubt, however, that if agriculture were pursued with any spirit, and the system of irrigation generally introduced on corn lands, or even if there were the slightest degree of providence in the natives, those dearths would not occur that on several occasions have been so fatal, especially in the mining districts. The European *cerealia*, such as wheat and barley, succeed best in the temperate regions, where the mean heat does not exceed 66° Fahr.: in fact, in the equinoctial regions of Mexico these grains are not found under the level of 2,500 ft. above the sea. The Mexican wheat is of excellent quality, equal to the best of the Andelusian: it is large, white, and nutritive. In well irrigated lands, and on good soils, the produce is said to average 24 for 1. Rye and barley resist cold better than wheat, and are cultivated in the highest regions; barley yielding abundant harvests, even where the thermometer indicates a heat during the day of only 57°. Oats are little cultivated. Among the other alimentary plants, most of which have been introduced by Europeans, are the potato (confined chiefly to the table-land), the yam, common both to the high and low country, the capsicum, raised in immense quantities for its spice, which is universally used instead of salt for seasoning food, beans, and various other garden vegetables common to Europe and America. Most of the fruits of Europe are common and plentiful; the olive and vine, introduced since the revolution, generally succeed well; and nowhere are there finer pine-apples, pomegranates, guavas, and alligator pears. One of the mose valuable plants in the country is the maguey (*Agave americana*), which Humboldt not unaptly terms the vine of Mexico. The maguey plantations are principally found in the states of La Puebla, Mexico, and Guanaxuato; but the plant is very hardy, and occurs in a wild state all over the country. Its growth is slow; but when arrived at maturity its leaves are from 5 to 8 ft. in length, and the stem often attains a height of 20 or even 30 ft. Its period of flowering is very uncertain, but once in ten years may be considered a fair average. At the flowering season, when the plant first begins to be useful, the exact time is watched when the stem of the flower is about to shoot up; the top is then cut off, so as to form a hollow, for the reception of the sap, which is regularly drawn off, and a vigorous plant will yield 15 quartillos daily for four or five months successively. The sap, which has a slight sub-acid taste, ferments readily in three or four days, being in its vinous state called *pulque*, a beverage which somewhat resembles cider, though with a disagreeable smell. Immense quantities of it are drunk by all classes, and many whites as well as Indians use no other liquor. A kind of brandy called *mexical* (very like whiskey) is made from the distillation of pulque. The maguey is useful, also, in other ways: its fibres are converted into thread, ropes and paper, its prickles serve for pins and needles, and its juice is effective in healing green wounds. Large quantities of sugar are raised in the neighbourhood of the capital, and the crops are very abundant: the lands are cultivated by free labourers, and the farming seems pretty good, though the process of refining is very clumsily conducted. In the commencement of the present century there was a large export of sugar, but this has for some years almost disappeared, and the present supply is not more than sufficient for the home consumption. Vanilla is extensively raised in the *tierras calientes*, E. of the Cordilleras, particularly in the state of Oaxaca. The cultivation of coffee is on the increase, and the quality of that raised on the best soil near the coast is said to be equal to the best produced any where else. Tobacco is a government monopoly, and its growth is confined to a small district near Orizava and Cordova. Its quality is inferior to that of Cuba, and, as the consumption exceeds the growth, considerable quantities are imported from the Havannah.

On the whole it must be admitted, on general grounds, that agriculture in Mexico has not made any progress in recent years. The cultivation of the soil is grossly neglected throughout the empire. No law, indeed, prevents the planting of the vine and olive tree; not only, however, has no advantage been taken of this change, but the very lands which were cultivated in the time of the Spaniards are now lying fallow. In a circle of a few leagues round Mexico there are large villages almost abandoned. The only manure which the land ever requires is water; this is rather scarce, yet many of the hydraulic constructions raised by the Spaniards at a great cost are in ruins, and seem likely to remain so. The lands, which, by means of this artificial irrigation, would be the most fertile in the world, are gradually becoming completely sterile. Their ploughs, and other agricultural instruments, are of the rudest description. No one troubles himself to introduce European improvements, nor even to import better tools from the United States.

Mining Industry.—The silver and gold mines of Mexico have always been deemed the main sources of its wealth; and, unquestionably, its mineral riches far exceed those of any part of America, except, perhaps, Peru. Before the war of independence there were, in the 37 mining districts of New Spain, somewhat more than 3,000 mines, producing annually about 21,000,000 dollars in silver, and about 2,000,000 in gold. Towards the close of the struggle many of the mines had been deserted, and their produce had declined a half, and does not yet materially exceed that amount. The theory of mining is little understood by the Mexicans, the oldest modes of working being still generally practised, notwithstanding the improvements that have been introduced by the English; and the machinery for draining the mines and raising the ore is of the most primitive description. Indeed, many of the mines have been abandoned, owing to the imperfections of the machinery, which, under more favourable circumstances, might be again worked with profit. The ignorance of the miners is only equalled by their obstinate adherence to old, and elsewhere long exploded, practices. The school

Digitized by Google

of mines (*Mineria*), the mere building of which cost 120,000*l.*, is at present in the most pitiable condition. It is unprovided with the means even of the most elementary instruction. It contains a vast chemical laboratory, but without the instruments requisite for the most simple experiments.

The quantity of silver annually extracted from the mines of Mexico very much exceeds that furnished by all the mines of Europe; but, on the other hand, the gold is not much more abundant than in Hungary and Transylvania; the proportion which the gold of Mexico bears to silver being as 1 to 26 nearly. Little native silver is found in any of the mines: sulphuretted and black prismatic silver are both very common and exceedingly productive in the veins of Guanaxuato and Zacatecas, two of the richest mining districts: the muriate abounds in the mines of Catorce and San Pedro, near San Louis de Potosi; and the martial pyrites of Pachuca yield three marks to the hundred weight. The Mexican ore, however, is poorer than that of Europe, 1,600 oz. of ore yielding only about 4 oz. of silver. The gold is produced by washing the earth and sand in some few places; but in the province of Oaxaca occur veins of native gold, usually mingled with the silver veins: the returns, however, seldom exceed 1½ oz. to the cwt. (Poinsett's Notes on Mexico, p. 226.) The business of the mines is followed by the native tribes from generation to generation: they lead a migratory life; removing, with their families, to districts where they expect the greatest profit from their labour: they are always paid by a share in the produce; regular wages, however high, being invariably rejected. The principal mines are in the states of Guanaxuato, Zacatecas, San Luis de Potosi, Chihuahua, Durango, Guadalaxara, and Mexico. The richest mineral tract lies between the 21st and 25th parallels of N. lat. Many of the mines have been very imperfectly wrought; and by far the larger part of the richest veins is yet unexplored. The ores appear to increase in richness on proceeding N. The mines in the confines of Durango and Sonora are peculiarly rich, lie near the surface, and hold out, wherever they have been tried, a promise of riches superior to any that Mexico has yet produced.

Iron is found in great abundance in Guadalaxara, Mechoacan, and Zacatecas; but no mines of that metal were worked before 1825. Copper is raised in Mechoacan, and Guanaxuato. Large quantities of copper money have been coined in the mint of the city of Mexico. Tin is obtained partly from mines, but principally from washings in the ravines. The lead mines, though rich, are quite neglected. Zinc, antimony, and arsenic have been found; but neither cobalt nor manganese. A quicksilver mine is wrought in the state of Querétaro. Carbonate of soda, used for smelting the silver ore, is found in great abundance crystallised on the surface of several lakes.

Manufactures.—The selfish policy of Old Spain, by which she endeavoured to keep her colonies as much as possible dependent on her own markets, or on supplies furnished by her, led to the enactment of laws prohibiting the rearing of silk-worms, and the cultivation of flax, and of the vine and olive. Coarse woollen and cotton fabrics, worth about 1,500,000*l.*, were formerly made; but these have greatly diminished since the revolution. Criminals and insolvent debtors were formerly condemned to work in the factories as a punishment. This state of things existed before the revolution, and it has been but little improved by the free intercourse which the Mexicans have now for several years enjoyed with the manufacturers and capitalists of Europe and the United States. 'One might,' says M. Chevalier, 'have supposed that when the ports were thrown open to the commerce of Europe, manufactories would soon have been established in a country where manual labour is cheap, where the workmen are submissive and skilful at imitation, where the soil produces the raw cotton, where the Spaniards had multiplied their flocks of sheep to a great extent, and where the rearing of the silkworm might be carried on with astonishing facility. The native Mexicans are, however, destitute of all spirit of enterprise, and strangers seldom attempt any permanent establishment. A more than ordinary display of industry would excite the jealousy of the natives; for nothing exasperates a Mexican more than to see Europeans and North Americans growing rich before his face. Cigars, hats, glass, and earthenware are produced on a large scale; but the factories are, for the most part, extremely ill-conducted. Mexican leather is very indifferent; paper is of bad quality, and exorbitantly dear: the making of cutlery and hardware is scarcely attempted, and, what is done, is badly executed; the use of cast-iron and tin for culinary utensils is almost unknown, and a very few years ago there was only one manufacturer of watches and optical instruments in the whole of Mexico. 'The Spaniards,' says Chevalier, 'are bad mechanicians, and no efforts of foreigners have been able to prevail on the Mexicans to deviate from the routine of their forefathers. All their tools are wretched; the common wheelbarrow even is unknown. Some merchants had imported two models, to be used in moving the bales of goods at the custom-house, but the workmen refused to make use of them.'

Commerce.—Mexico is one of the most favourably situated countries for commerce. But her trade labours, notwithstanding, under serious disadvantages. Though washed by the Atlantic and Pacific Oceans, neither of her coasts is accessible for several months of the year. On the E. coast, or that bordering the Gulf of Mexico, there is not a single good harbour; and during the season when the coasts are accessible they are extremely unhealthy. Owing, also, to the rapid ascent from the shores to the interior, the construction of roads, and the transport of commodities to and from the inner provinces, is alike difficult and expensive. Down to 1778, when the Spanish government relaxed the old prohibitive system, the foreign goods legally imported into Mexico comprised only a few Chinese and European manufactures; the former brought annually in *one* galleon of about 1,400 tons, and the latter sent *once in three years* exclusively in ships chartered by government from Seville or Cadiz. On the opening of the trade in 1779, private capitalists engaged in it, and after that period, at an average of 12 years before and after, the returns for exports alone rose from 11,000,000 to 19,000,000 of dollars, the difference being chiefly in the quantity of specie. On the breaking out of the civil war, the ports of Tampico, Mazatlan, and San Blas were opened by the new government; and soon afterwards foreign vessels were admitted into all the ports on the same terms as Spaniards. The Spanish capitalists retired to Cuba or Spain; and their places were supplied by British and American merchants, who established themselves in the interior, and supplied the inhabs. with manufactured goods, the superior quality and cheapness of which, no doubt, had some influence in depressing native manufactures. The following tabular statement shows the total value of the imports and exports of the port of Vera Cruz in each of the years 1858–60:—

Digitized by Google

Years	Imports		Exports	
	Piastres	£	Piastres	£
1858	10,038,500	2,007,700	2,915,600	583,120
1859	14,027,900	2,805,580	5,856,300	1,171,260
1860	13,198,400	2,639,680	6,883,600	1,376,720

Besides Vera Cruz, the only important harbour of Mexico is Tampico. The subjoined table gives the total value of the imports and exports of Tampico in each of the years 1858–63:—

Years	Imports	Exports
	Total	Total
	£	£
1858	266,340	266,932
1859	252,607	377,867
1860	379,127	1,315,807
1861	344,447	1,323,477
1862	209,874	1,609,182
1863	559,692	888,829

Of the imports of 1863, merchandise to the value of 180,025*l.* came in British vessels, while of the exports of the same year that carried by British vessels amounted to 742,829*l.*

Government.—Mexico, formerly a federative republic, adopted the monarchical form of government in 1864, in consequence chiefly of the occupation of the greater part of the country by French troops. On the 10th of July, 1863, the 'Asemblea de Notables,' a body comprising a number of leading citizens of the capital, elected Archduke Maximilian of Austria emperor of Mexico, and the proffered crown was accepted by the archduke on the 10th of April, 1864. The new emperor landed at Vera Cruz on the 29th of May, 1864, and assumed the reins of government, as Maximilian I., on the 12th of June following, declaring his intention to make his rule, *pro tempore*, absolute.

Revenue and Expenditure.—The revenue of Mexico at different dates has been as follows:—

	Doll.		Doll.
1700 . .	3,000,000	1827 . .	10,491,299
1763 . .	5,705,876	1828 . .	12,232,385
1802 . .	20,200,000	1829 . .	14,493,189
1825 . .	10,690,608	1830 . .	18,923,299
1826 . .	13,289,682	1831 . .	16,413,060

Subsequently to 1831 the revenue declined considerably, but it rose again after the establishment of the imperial government in 1864. According to semi-official reports the estimated receipts for the year 1865 were expected to amount to 20,000,000 dollars, or 4,000,000*l.* On the other hand, the public expenditure for the same year was calculated to amount to at least 9,000,000*l.* This large expenditure was necessitated chiefly through the maintenance of a disproportionately large army, required for the pacification of the country, numbering about 20,000 men, chiefly foreigners. There are five fortresses—San Juan de Ulloa, Campeche, Perote, Acapulco, and San Blas.

Religion.—The Roman Catholic is the only publicly recognised religion, but others are tolerated. The church establishment consists of the archbishop of Mexico and 9 bishops, having an aggregate income of 539,000 dollars, with 3,677 parochial clergy. There are also 10 cathedrals, having 168 canons and other dignitaries and 1 collegiate church. The regular clergy comprise 1,978 monks, chiefly Franciscan; and there are 156 convents. The annual income of the ecclesiastics is valued at about 12,000,000 dollars. The Spanish monks and priests were expelled during the revolution, and their places are filled by Creoles, whose morals are said to be at the lowest ebb. Religion has little influence over the White pop., and the hold of the church over the Indians, never complete, is now fast lessening, for they are all, more or less, inclined to idolatry.

Education.—The necessity of education is recognised by law, which requires that the priests should teach all persons to read and write; but the regulation has little practical effect. Under the old government, botanical pursuits were much encouraged, and chemistry and mineralogy were taught in the school of mines; but the progress of science, literature, and arts has been checked by the unsettled state of the country. 'In fact,' says M. Chevalier (Le Mexique, 1864), 'elementary instruction has remained what it was in the time of the Spaniards. The clergy had then the exclusive management of it, and have so still, and have but little inclination to enable the poor to read the books published under the regime of a free press. There are even fewer schools than there were, in consequence of the diminution in the number of the clergy. Education of a superior kind is even worse provided for. Under the Spaniards, there existed at Mexico a school for the fine arts, richly endowed: I have been unable to discover its existence now. There is a building called a museum, where I found nothing of interest except a collection of the portraits of the viceroys since the time of Cortez, and a few Azteque manuscripts. Some years ago, the establishment of a polytechnic school was decreed, but the decree has yet to see the commencement of its execution. There is not even a military school, though the attention of the government is almost exclusively devoted to the army. There is nothing deserving the name of a school of law or medicine; and it may be well imagined that schools of industry or commerce are wholly unknown.'

Population.—The classes of the pop. are singularly varied, and are characterised by distinctions more striking than those in any other country. Four distinct and rival classes may be enumerated: 1. the *Chapetones*, or pure Spaniards, never exceeding 80,000 in the palmy days of New Spain, but now hardly amounting to 24,000, and, politically considered, a degraded class; 2. the *Creoles*, or native whites of European descent, forming the wealthiest and most powerful part of the pop., estimated at 1,300,000; 3. the *Indians*, or native Mexicans, constituting the great mass of the rural labourers, and supposed to amount to 3,800,000; 4. the Mixed castes, comprising *Mestizos*, *Mulattos*, *Zambos*, *Quadrooms*, and *Quinterooms*.

The king of Spain formerly exercised a right of conferring the exclusive privileges enjoyed by the white pop. on individuals of any shade by a decree of the audiencia, *Que se tenga por blanco*—that he be deemed white. These distinctions of colour have been done away with as far as political privileges are concerned by the revolution, which admits persons of all colours to the equal enjoyment of civil rights; and hitherto, indeed, this has been by far its best if not only its good effect. The Mulattos and Zambos principally reside in the low country, the Whites on the table land. The Indians are divided into numerous tribes, speaking upwards of 20 languages totally distinct from each other, and of which 14 grammars and dictionaries have been published. Their character remains much the same as it is alleged to have been at the time of the conquest. Indolence, blind submission to their superiors, and gross superstition, are as much their characteristics now as formerly. The form of their religion is changed, and that is nearly all: they take the

Digitized by Google

same childish delight in the idle ceremonies and processions of the Catholic church as they once took in the fantastic mummeries of their aboriginal idolatry. They are scattered over the country as labourers, distributed in villages, or else live in the towns as artisans, workmen, or beggars. In a few instances they have accumulated property, and acquired respectability; but, in general, they are indolent, ignorant, and poverty-stricken. Some authorities hold them to be wholly incapable of any high degree of civilisation; but they might, perhaps, be improved, were measures taken to enforce their education, and to make a fair distribution among them of the many thousands of acres which have been thrown out of cultivation by the consequences of the revolution. They are classed in two great divisions: 1. Mansos, comprising those who have a fixed residence, cultivate the land, adopt the habits of civilised society, and maintain an amicable intercourse with the other races: 2. Bravos, comprising those who live a wandering life, supporting themselves by hunting, and avoiding all intercourse with the other classes, with whom many of their tribes are in a state of perpetual warfare. The latter principally inhabit the N. states along the river Gila, and the extensive and little known mountain ranges on the upper part of the course of the Rio Grande del Norte and the NW. of Texas, called the Bolsor de Mapimi, from the lake of Man. An independent tribe, called Mayas, inhabits the tract between Yucatan, Tabasco, and Central America. It has made some progress in civilisation, cultivating maize and cocoa, and wearing garments made of cloth prepared from cotton and the bark of the caoutchouc tree.

Mexico, as already stated, is a country so rich, that famine scarcely visits even the most indolent. In the *tierras calientes*, and even on the plateau, the natives are content to dwell with their families in a cabin of bamboo trellis-work, so slight as scarcely to hide them from the stranger's gaze, and to sleep either on mere mats, or at best on beds made of leaves and brushwood. Their dress consists simply of a pair of drawers, or petticoat, and a *scrape* (a dyed woollen garment), which serves for a cloak by day, and a counterpane by night. Each has his horse, a sorry beast, which feeds at large in the open country; and a whole family of Indians is amply supplied with food by bananas, chili, and maize, raised, almost without labour, in a small enclosure round the hut. Labour, indeed, occupies but a trifling portion of the Indian's time, which is chiefly spent in drinking *pulque*, sleep, or singing to his mandolin hymns in honour of Notre Dame de Gaudeloupe, and occasionally carrying votive chaplets to deck the altar of his village church.

Antiquities. — Humboldt, Bullock, and other European travellers have furnished excellent descriptions of numerous ancient monuments, which show that the native Mexicans, before the loss of their independence, had been in some respects a comparatively civilised and ingenious people. Among the most extraordinary are pyramids, somewhat similar in exterior form to those of Egypt, and in some instances even of larger dimensions. The base of the pyramid of Cholula is a square of 1,423 ft. on each side, and its height is estimated at 177 ft. A far more elegant building, of similar shape, is situated in the N. part of the state of Vera Cruz; it is formed of large blocks of porphyry, highly polished, and arranged in six stages, diminishing in size according to the elevation, and having all its materials most nicely adjusted. The base is a square of 82 ft, on the sides; it is 65 ft. high; and the ascent to its top is by a flight of 57 stairs: the front is richly adorned with hieroglyphics and curious sculptures. The mountains of Tezcuco are nearly covered with the remains of ancient buildings and cities. The ruins of Palenque, near the Rio Chacamas, a branch of the Usumasinta, extend upwards of 20 m. along the ridge of a mountain; and their architecture resembles more that of Europe than Mexico. The remains of an Aztec city, called by the Spaniards La Casa Grande, are to be seen about a league S. of the river Gila, in the state of Occidente. They are spread over a space of more than a square league. In the centre is a teocalli, laid down according to the cardinal points, its sides being 445 ft. by 276 ft. It has 3 stories and a terrace, but no stairs. Within are 5 apartments, each 27 ft. long, 11 broad, and 11 high. A wall with towers surrounds the main building. The traces of an artificial canal to the river are visible. The neighbouring plain is strewed with fragments of red, blue, and white earthenware, and pieces of obsidian, which prove that the Aztecs had passed through a country abounding with this volcanic substance before they dwelt on this spot, previously to their final settlement in Mexico. In the W. part of the state of Chihuahua are similar ruins of great extent, which are also considered to have been the site of one of the temporary stations of the Aztecs during their migration southwards. Besides sculptures, vases of elegant form have been found, similar to those of Etruria and Egypt. Roads formed of large hewn blocks of stone may be traced, not only in the neighbourhood of those ruined cities, but at great distances from them.

History.—The first settlers in Mexico are believed to have been the Toltecans, a tribe of Indians from the Rocky Mountains, who fixed themselves, after several migrations, near the present city of Mexico, and flourished there for nearly four centuries. Drought, famine, and pestilence at length exterminated them, but not till they had imparted some degree of civilisation to the barbarous Chichemecas, who were the next possessors of the soil, and were in their turn displaced by the Aztecans, who, in 1160, migrated southward from a country N. of the Gulf of California, and first fixed themselves in the city of Zumpango, in the valley of Mexico, but afterwards in some islands in the lake Tescuco. Here they maintained themselves by fishing and agriculture, till, in 1325, they founded their chief city on the island of Tenochtillan, and called it *Mexico*, in honour of their martial deity Mexitli. This nation rapidly increased in power; and, if the remains of monuments and large cities were a just test of civilisation, the Aztecans might claim to rank pretty high among the nations of antiquity. But they had invented no alphabet, and had nothing better than a rude species of picture writing to record events, and were ignorant even of the useful metals. Their barbarism is sufficiently shown by their custom of sacrificing great numbers of human victims on coronation fetes. Montezuma I., the greatest of their sovereigns, extended the Aztec dominions on one side to the Gulf of Mexico, and on the other to the Pacific Ocean; but it must be stated at the same time, that many tribes within this tract yielded only a reluctant obedience, and some even retained their independence. Such, briefly, was the state of Mexico when Munez de Balboa first landed on its shores. Its conquest was effected by Fernando Cortes, who sailed thither in 1519 with a small force, comprising, on the whole, only about 700 men. He was met at Vera Cruz by ambassadors from Montezuma the younger, sent to discover his intentions, and to command him to withdraw from the country. But

Digitized by Google

Cortes having refused to return till he had communicated in person with the emperor, at once proceeded to the capital. Here having got possession of the person of Montezuma, Cortes endeavoured by his intervention to effect the subjugation of the empire. But the Mexicans having recovered from the surprise into which they were at first thrown by the seizure of the emperor, resolved at all hazards to attempt the expulsion of the Spaniards. Montezuma was soon after killed in a conflict in the city, and Cortes was compelled to retreat to Tlascala. Here having re-organised his small force, secured the co-operation of a large body of Indians, and built brigantines to be employed in the navigation of the lake Tezcuco, he again pushed forward to the city; and, having recommenced the siege, took it after an obstinate resistance of 75 days. The fate of the cap. decided that of the empire. Province after province submitted, and the power of Spain was extended from Vera Cruz to the Pacific. Cortes, on his return to Spain, was received at first with high honours and liberal rewards; but his court favour soon declined; the emperor refused to appoint him captain-general of Mexico; and, after some adventures, suited to his ardent and determined spirit, he died near Seville, in 1554, at the age of 63.

Under the Spanish arrangements Mexico was a subordinate kingdom, governed by a viceroy, with powers nearly equal to those of the sovereign, checked only by the *residencia*, or court of investigation, before which he was liable to be called to account for his administration, on his return home, and by the *audiencia*, or court of final appeal in Mexico. By these arrangements, also, the natives were to be considered as freemen and vassals of the crown; and the Spanish discoverers, settlers, and their posterity, were to have a preference in all civil and ecclesiastical appointments. The natives were thus, in fact, excluded from holding all offices of trust or profit. The great object of the Spanish government was to keep the country in the hands of the European or white population; and the means adopted to effect this object were, 1st, to discourage native manufactures, for the benefit of those belonging to the mother-country; 2ndly, to make all the ecclesiastical establishments wholly dependent on the king, without any interference of the pope. The growth of flax, hemp, and saffron was prohibited under severe penalties; that of tobacco was made a government monopoly. The cultivation of the vine and olive was likewise prohibited; that of coffee, cocoa, and indigo tolerated only under certain restrictions, and in such quantities as might suffice for the demands of the mother country. This system was maintained nearly three centuries, during which Mexico continued to be a blank in the history of nations, and known only by the issue of the precious metals. In 1808, however, the news of the abdication of Charles VI. of Spain gave a shock to the royal authority which it never recovered. The natives and coloured population embraced this opportunity of asserting their claim to the rights of freemen, which was opposed by the audiencia, who also seized on the viceroy, Hurrigarry, and sent him prisoner to Spain, where he was confined till the general amnesty. An open insurrection against the European authorities broke out in 1810, at the head of which were Hidalgo and Morelos, two priests of New Spain; and, under the auspices of the latter, the first national congress assembled at Chilpanzingo in 1813. One of its earliest acts was a declaration of the independence of Mexico.

For several years the history of the revolution was only that of a sanguinary guerilla warfare leading to no permanent results. At length, in 1821, Iturbide, who had previously been a royalist, declared suddenly in favour of the liberals, and published his manifesto in favour of a constitutional monarchy. His cause was embraced with such enthusiasm by the whole population, that he succeeded not only in putting down the Spanish government, and forming a national congress, but also prevailed on that body to make him emperor of Mexico, under the title of Augustin I. His dissolution of the congress, however, by military force, raised a feeling against him, which, finding it impossible to repress, he abdicated the throne. He was not only allowed to withdraw from the country, but rewarded for his past services by an annual allowance of 5,000*l.*, accompanied by an edict of outlawry in case of return. In spite, however, of this prohibition, he returned clandestinely, and was soon discovered, apprehended, and executed. On the expulsion of Iturbide the congress re-assembled, a provisional government was formed, and an executive appointed consisting of Victoria, Bravo, and Negrete, all persons of proved patriotism. The government was modelled on that of the United States, but the hopes then formed of its stability proved fallacious. Since this epoch repeated attempts at revolution convulsed the country. During the whole of the struggle for independence, the population had been split into two parties, at first distinguished by the names of Imperialists, who adhered to the mother-country, and Republicans, who asserted its independence: but these parties afterwards merged into those of Centralists and Federalists, the former advocating a single superintending government, and the latter that of the independent government of states, only federally connected. This struggle between the rival parties continued till 1861, on the 31st October of which year a convention was signed at London by the representatives of England, France, and Spain for intervention in Mexico, to enforce various pecuniary claims against the Republican government. From this convention, however, England and Spain withdrew after a time, leaving to France the task of occupying the country. This was done in the course of the years 1862–3, and the result, already mentioned, was the election of Archduke Maximilian of Austria as emperor of Mexico.

Mexico, or Mejico (Mex. *Tenochtitlan*), the cap. of the modern empire of Mexico, and anciently the chief city of the empire of Montezuma, 7,426 ft. above the sea; lat. 19° 25′ 40″ N., long. 101° 25′ 30″ W. Pop. estimated at 205,000 in 1864. The city stands nearly in the centre of an elevated plain, or plateau, surrounded by mountains, and having an area of about 1,700 sq. m., 1-10th of which is covered by 4 lakes, the largest of which (Tezcuco), nearest the city, has an area of 77 sq. m. The old city of Mexico, or that taken by Cortes, was built on a group of islands in the lake Tezcuco; but, though the modern city occupy its site, it is, owing to the diminution of the waters of the lake, partly originating in natural and partly in artificial causes, situated about 2½ m. W. from the lake. The ground on which it stands is, as might be anticipated, low and swampy; the largest buildings are erected on piles, and the roads leading to it are raised 6 or 8 ft. above the surrounding flat. Though within the tropics, it is so elevated that its mean temperature is only 65° Fahr., coincident with that of May in England. It is said, by Humboldt, to be 'undoubtedly one of the finest cities ever built by Europeans in either hemisphere; being inferior only to Petersburg, Berlin, London, and Philadelphia, as respects the

Digitized by Google

regularity and breadth of its streets, as well as the extent of its public places.' The architecture is generally of a very pure style, and many of the buildings are of noble construction, though usually of somewhat plain exterior. Two sorts of hewn stone, porous amygdaloid and porphyry, are used in the better parts of the city. The balustrades and gates are of Biscay iron, ornamented with bronze; and the houses, which are 3 or 4 stories high, have flat-terraced roofs, like those in Italy and other S. countries. The streets are wide, well paved and flagged, but not well lighted or watched at night. They run almost uniformly at right angles to each other, many of them being nearly 2 m. in length, perfectly level and straight, and offering, from every point, a view of the mountains that surround the valley. Nearly all the houses are hollow squares, with open courts surrounded by colonnades, and ornamented with plants. The stairs to the interior front the outer gate, and the best apartments, which are showily painted in mosaic and arabesque, generally face the street. Numbers of houses are covered with glazed porcelain, in a variety of elegant designs and patterns. The *Plaza Mayor*, or grand square, is one of the finest to be seen in any metropolis: its E. side is occupied by the cathedral and *segrario*, or parish church, and its N. side by the palace, while on the other sides are handsome rows of shops and private dwellings. In its centre is a colossal statue of Charles IV. The effect of this square, however, is much impaired by the introduction of a paltry building, called the Parian, a large ungainly pile, in one angle, used as a market or bazaar, appropriated to the sale of miscellaneous articles, and the resort of the idlest portion of the inhabs. The imperial palace, a fine building, nearly square, with a front several hundred feet in extent, comprises 4 large courts, in which are the public offices, barracks, and a large botanic garden. The cathedral, on the N. side of the square, on the site of the great temple of the god Mexitli, is a heterogeneous edifice; one part of the front is low, and of bad Gothic architecture, while the other and more modern part is in the Italian style, and displays much symmetry and beauty; its two towers are ornamented with pilasters and statues. The interior is imposing, lofty, and magnificent; but the grandeur of the effect is much diminished by the ponderous erections in different parts, and a profusion of massive carved ornaments, pictures, and painted statues. The high-altar and its appendages are inclosed by a massive railing of mixed metals. In the interior are some curious remains, including several idols and a 'stone of sacrifice,' that is, a stone on which the human victim was placed when the priest tore out his heart. On the outer wall is fixed the *Kellenda*, a circular stone of basaltic porphyry, covered with hieroglyphic figures, by which the Aztecs, or native Mexicans, used to designate the months of the year, and which is supposed to have formed a kind of perpetual calendar.

The church services are celebrated with great magnificence; nor even in Rome herself is greater attention paid to the external minutiæ of religious observances. Besides the cathedral, there are from fifty to sixty other churches, most of which display, more or less, the barbarous mixture of style that characterised Spanish architecture during the sixteenth and seventeenth centuries. There are, also, numerous religious houses, two of which, viz. the Franciscan and Dominican convents, are extensive and wealthy establishments. Opposite to the latter of these is the palace of the Inquisition, now applied to other purposes. This tribunal was abolished by Iturbide, in 1822. The Roman Catholic religion, however, still maintains its ascendancy; few buildings, whether public or private, are without their patron saint; and the traveller everywhere meets with shrines, pictures, and processions. The *Minería*, or college of engineers, was originally a large and handsome building; but, owing either to a want of care in making the foundations, or to the effect of earthquakes, the walls have settled in several parts, and the front is visibly out of the perpendicular. Lectures are given occasionally on the sciences connected with mining; and in one of the rooms is a tolerably good collection of minerals, though generally very inferior to those in European museums. The university, founded in 1526, and public library, are also in a state of neglect. The *Acordada*, or public prison, is a large substantial structure, fitted to contain about 1,300 prisoners; the barracks, also, formerly used as a hospital, are very extensive and well constructed. The theatre is a respectable building of considerable size; but the establishment has for some years had so little success that it is very seldom opened. The *Plaza de Toros*, for the exhibition of bull-fights, consists of a great circular inclosure, fitted up exactly like that of Madrid, and fitted to accommodate from 2,000 to 3,000 spectators. The great cigar manufactory, which belongs to the government, stands at the SW. angle of the city, and comprises a very extensive establishment, which supplies the whole demand of the country for cigars. The Alameda, or public walk, at the W. end of the city, somewhat resembles a park, but has the stiff, formal appearance of Dutch and French grounds. In the centre is a fountain, supplied with water from the great aqueduct leading from Santa Fé to the city. Another open space, called the Passeo, about 2 m. in length, planted with double rows of trees, is much frequented, on holydays, by persons in carriages and on horseback. In the city, also, are several *Portales*, or covered colonnades, lined with shops and stalls, and forming a favourite evening promenade long after the Alameda and Passeo have ceased to be frequented. The environs, also, present, on fine dry evenings, a very lively scene of bustle and gaiety: hundreds of canoes of various sizes, mostly with awnings, and crowded with native Indians or Mestizos, are seen passing in every direction along the lake and canals, each boat with its guitar-player at the stern, and some of the party either singing or dancing.

The manufactures are not generally remarkable, either for extent or fineness of workmanship. Nothing is exposed in the shop windows, and most of the articles are made in the places where they are offered for sale. Gold and silver lace, trimmings, and epaulets, are made in great perfection. Silversmiths' work is also done on an extensive scale: the ornaments are finished by hand; the chasing is sometimes well executed, but in general the articles are clumsy and heavy. Jewellery employs a few hands; but all precious stones, except rubies, are scarce, and the work is much dearer than in Europe. Cabinet-work is dear, and of very inferior quality, made with clumsy tools, and of bad wood: the saw is scarcely known, and the turning-lathe is of the most primitive construction. Coach-making is much better understood: the Mexican vehicles are firmly put together, of handsome shape, and well finished; and, in respect of painting, gilding, or varnishing, they are but little inferior to those made in Europe, whence the handles and metal furniture are procured. Beaver and felt hats and cotton cloaks are made on a large scale, for the supply of all parts of the empire, these being important articles in the internal trade of the coun-

Digitized by Google

try. Shops for the sale of *pulque* (a kind of beer made from the aloe), and native and Spanish brandy, are very common, and have a gay appearance. The markets are well supplied with animal and vegetable productions, brought along the lake and canal of Chalco by crowds of canoes, usually navigated by women. Turkeys, fowls, pigeons, and many varieties of wild waterfowl are very abundant and cheap; as are hares, rabbits, tortoises, frogs, and salamanders, all of which are esteemed good eating by the inhabs. The meat-market is well supplied with beef, mutton, and pork, but veal is prohibited. The meat, however, is not of the best quality. There is great variety of vegetables and fruits, including bananas, plantains, citrons, shaddocks, melons, pomegranates, dates, mangoes, tomatas, and other vegetable productions of tropical countries.

The greater part of these are cultivated on the *chinampas*, or floating gardens, of which there are two sorts, one moveable, the other fixed, and attached to the shore. On the marshy banks of the lakes of Xochimilco and Chalco, the water, in the time of the great floods, carries away pieces of earth covered with herbs, and bound together by roots. These, being driven about by the wind, sometimes unite into small islands, which, being taken possession of, are planted with flowers and roots. Artificial *chinampas*, or islands, are also frequently formed, of reeds, rushes, roots, and brushwood, well compacted together, and covered with black mould; these sometimes contain the cottage of the Indian who acts as guard. They are towed or pushed with long poles, and are thus removed from one side of the banks to the other. The fixed *chinampas* are parallelograms from 300 to 400 ft. in length, and from 10 to 20 ft. in width. They rise about 3 or 4 ft. above the water, and afford, from their command of water, beans, small peas, pimento, potatoes, artichokes, cauliflowers, and a great variety of other vegetables.

The pop. of Mexico is of an extremely mixed character, comprising Creoles, or descendants of Spaniards; Mestizos, or half-casts between Europeans and Indians, many of whom are scarcely distinguishable by colour from the former: Copper-coloured natives; and Mulattoes. The lower orders are filthy, despise labour of every kind, and are constantly seen lying in the church porches, leaning against the walls, and loitering about the markets. In many respects they bear a striking resemblance to the lazzaroni of Naples. There is here, also, a general torpor of the faculties, and the *dolce far niente* seems to be the *summum bonum* of all classes. The dress of the higher orders of men closely resembles that of Europeans, the large cloak being as common here as in Spain. The costume of the ladies is universally black, with the veil and mantilla; but, on holydays and public occasions, their dresses are remarkable as well for gayness of colours as for expensiveness of material. Indeed, when in their carriages on the Passeo, they contrast somewhat strangely with the same persons, when seen at home in complete déhabille, without stockings, squatting on the floor, and either pursuing their favourite amusement of cigar smoking, or eating cakes and capsicum out of the dirty earthenware basins of the country. The ladies seldom go out during the day; but, after sunset, young and old come forth from their hiding-places, and the Alameda, Passeos, and Portales swarm with the damas and signoritas of the city, chatting and smoking with their gallants. Many gentlemen belonging to the higher classes are intelligent, and a few even fond of literature; but the city is so badly supplied with libraries, and other means of study, as to give little encouragement to such pursuits. The white Creoles are distinguished by their mildness, courtesy, and hospitality: their besetting sin is gambling. Female virtue is on the same low level as in Old Spain, but the Mexican ladies are better educated.

The original city of Mexico, or, as it was called, Tenochtitlan, built, as already stated, on a group of islands in the lake Tezcuco, was founded in 1325: it was connected with the main land by three principal causeways of stone and earth, about 30 ft. in breadth, and extending from 2 to 6 m. over the surrounding marshes. These dikes still exist, and their number has since been increased. They form, at present, paved causeways across the marshy grounds, which were formerly covered with water; and, being of considerable elevation, are useful in securing the city from inundations. The better to preserve the city from the chance of this calamity, the great drain was commenced in 1607, which has now reduced the lakes of Zimpango and San Christoval within comparatively narrow limits, and prevented their waters in the rainy season from flowing into the lake of Tezcuco, and threatening, as they sometimes did, to submerge the city.

Mexico, when first discovered by the Spaniards, was a rich and populous city; the seat of government, religion, and trade. According to Cortes, it was as large as Seville or Cordova, was well built, and well supplied with various products; but these are the statements of parties naturally disposed to magnify their own services, and should be received with considerable modification. It was taken by the Spaniards in 1521, after a protracted siege, in the course of which it was nearly destroyed.

Mexico (Gulf of), a large inland sea connected by the Florida channel with the N. Atlantic Ocean, and by the channel of Yucatan with the Carribean Sea, sit. between lat. 18° and 31° N., and between long. 81° and 98° W. Length from E. to W. 1,200 m.; average breadth, 650 m.; area, about 800,000 sq. m. This sea, which is of an irregular circular shape, is, unlike the Carribean Sea, almost clear of shoals and islands, none being found except on the coasts of Yucatan and Florida. Along the coast of Mexico its soundings are very regular, with 100 fathoms at a distance of 30 m. from the shore. On the N. side, and especially opposite the mouths of the Mississippi, the depth is considerably diminished, and at its E. extremity the navigation is rendered intricate and dangerous by the Tortugas bank, Florida reef, and various other keys, shoals, and islets, including the great Bahama bank, which surrounded the N. coast of Cuba. The E. trade winds prevail from April to October, this being usually the wet season: the *Nortes* begin in October, but are not violent till the middle of November, from which time till the end of February they blow with great fury, and are objects of much dread to navigators. These gales last for four or five, and occasionally even ten, days; but their extreme fierceness is usually spent in the first 48 hours. At these times the larger vessels, which cannot enter the shallow harbours of the Mexican coast, are obliged to slip their anchors, and keep as far as possible off shore. Examples are not wanting, also, of *nortes* happening between May and August, at which time they are particularly furious. Luckily, however, the hurricanes and tornados of the gulf are by no means so fierce and destructive as those in the Carribean Sea.

The principal current of the Gulf of Mexico, and the only one worth mention, is that which sets WNW. between Cape St. Antonio and Cape Catoche: this runs from 12 to 30 m. a day, and is

Digitized by Google

perceptible even during the *nortes*, except close along the shores of Mexico. At the NW. extremity of the gulf its course gradually changes, till, at the mouth of the Mississippi, it turns E., and afterwards SE., as it again rushes out into the Atlantic Ocean at the rate of 80 m. in the twenty-four hours. (This remarkable current, commonly known as the *Gulf stream*, is described in the article ATLANTIC OCEAN.) The tides of the Gulf of Mexico are of no great importance, they nowhere exceed 3 or 4 ft., but their average rise is not more than 2 ft. The colour of the water is a deep indigo, darker or more intense than that of the ocean: phosphorescent lights shine on it with great brilliancy, and between the coasts of Yucatan and Louisiana great quantities of *fucus natans* occur in parallel lines from SSE. to NNW., and are carried out in large masses through the straits of Florida.

MEZE, a town of France, dép. Hérault, cap. cant., on the lagoon of Thau, 5 m. NW. Cette. Pop. 6,106 in 1861. The town has a small port, capable of receiving 60 vessels of 40 tons each, and manufactures of brandy and liqueurs. Near it is the abbey of Vallemagne, an edifice of the 13th century.

MEZIÈRES, a fortified town of France, dép. Ardennes, on the Meuse, which mostly surrounds the town, and is here crossed by two stone bridges, 80 m. NW. Metz, on the railway from Metz to Luxembourg. Pop. 5,605 in 1861. The town is walled, and is further defended by a strong citadel. It is ill built, and has few edifices worth notice, except the town-hall, the prefecture, the hospital, founded in 1412, and a par. church of considerable antiquity. Mezières, though the nominal cap. of the dep., has no court of primary jurisdiction, that tribunal being seated at Charleville. It is, however, the seat of boards of taxation, artillery, and forest inspection, and a society of agriculture; and has tanneries, breweries, and some trade in leather, coarse woollens, and linens. Chevalier Bayard, with a garrison of only a few thousand men, successfully defended Mezières, in 1520, against a powerful Austrian army; and, in 1815, the town held out for two months against the Prussians.

MIAKO, a large city, and the ecclesiastical cap. of the Japanese empire, in the island of Niphon, on the Yedogawa, 230 m. W. by S. Yedo; lat. 35° 24′ N., and long. 153° 30′ E. Pop. supposed to be 600,000, exclusive of the *Daïri*, or Mikado's court. It is situated in a spacious plain, inclosed on all sides by high mountains, and almost entirely formed into fine gardens, interspersed with temples, monasteries, and palaces. It is nearly 4 m. in length, and about 3 m. broad, with narrow but regular streets, lined by houses two stories high, built of wood, lime, and clay, most of them being very slightly and poorly constructed. The sacred Mikado, or supreme emperor, emphatically termed, 'the Son of Heaven,' has his residence on the N. side of the city, in a quarter comprising about a dozen streets, and separated from the rest of the buildings by walls and ditches; but, owing to the great diminution of the revenues furnished by the *sjogûn*, or viceroy (the substantial sovereign), the whole is reported to have a very dilapidated appearance, little in accordance with the rank of a being more divine than human. On the W. part of the town is another palace, built of stone, and strongly fortified: it belongs to the *sjogûn*, who resides in it when he comes to pay his respects to the emperor. This practice, however, has long been discontinued, and the building is now used for the accommodation of certain functionaries, sent thither from Yedo to watch the proceedings of the *Daïri*. The members of this court, who view themselves as superior to the rest of the Japanese, are chiefly engaged in the study of literature and science, the *Daïri* being, in fact, the highest college in Japan for the cultivation of theology, and various other branches of learning. The almanacks, formerly imported from China, are now constructed, including the calculation of eclipses, in the Daïri college; and, at least, ¾ths of all the works, published in Japan, are produced by the *literati* of Miako, some of whom, however, are connected with other colleges and high schools, wholly independent of the Daïri. This city is likewise the principal manufacturing depôt of the empire, every kind of handicraft known in Japan being carried to the greatest perfection. Nearly every house has its attached shop well provided with goods, and the japanned wares and carved ornaments of Miako are unequalled either in Japan or China.

MIAVA, a market town of NW. Hungary, co. Neutra, on the Miava, a tributary of the Morava, 48 m. NNE. Presburg. Pop. 10,164 in 1860. The inhab. are mostly of Sclavonian origin and Lutherans. It has manufactures of woollen stuffs and bagging, several distilleries, and some trade in hemp and flax.

MICHAEL (ST.), an inconsiderable bor. and market town of England, co. Cornwall, in pars. Newlyn and Enoder of hund. Pyder. Pop. 132 in 1861. This, which is said to have been a town of some importance previously to the Norman conquest, is now, like others of the Cornish bors., an inconsiderable village. It returned 2 mems. to the H. of C. from the 6 Edward VI. down to the Reform Act, by which it was disfranchised. The market has long been extinct, but sheep fairs are held here July 28 and Oct. 15.

MICHIGAN, one of the U. States of N. America, in the NW. part of the Union; its territory, consisting of two distinct peninsulas, comprised between lat. 41° 30′ and 47° 20′ N., and long. 82° 25′ and 90° 30′ W. Area 56,243 sq. miles, pop. 749,113 in 1860. The Upper Peninsula is, for the most part, inclosed between Lake Superior to the N., Lake Michigan to the SE., and the Wisconsin or NW. territory to the S. and W. Its surface and soil are various, a considerable portion consisting of sterile sand ridges and marshy tracts; while the other, or hilly tracts, are generally covered with dense pine forests. The whole region is inhabited principally by Wild Indians, and only occasionally visited by traders in furs and peltry. The climate is severe; little or no corn is grown, and the fur trade and fisheries are the chief sources of wealth in this part of the state.

The Peninsula-Proper, or Lower Michigan, is inclosed by Lake Michigan on the W., and Lakes Huron, St. Clair, and Erie, and their communicating rivers on the N. and E., and is in a much more advanced state of civilisation than the other. Its shores are, in some parts, rocky and broken, and, along Lake Huron, high and precipitous; but its surface is mostly level, or merely undulating: the central region consists of a table-land little elevated above the level of the surrounding lakes, to which it slopes in every direction. There are many rivers, some of which are navigable for a considerable distance. Grand River, St. Joseph's and the Saginaw, are the largest: the first two fall into Lake Michigan, and the last into Lake Huron. Small lakes and ponds are also numerous.

The land in the N. is covered with dense forests of pine trees, and some parts in the S. are richly wooded. Fewer prairies exist in this than in any other of the NW. states, and the largest is only a

Digitized by Google

few miles in circuit. They are principally in the W. and SW., and are divided into the wet and the dry. The dry prairies have a rich soil from 1 to 4 ft. deep, are easily cultivated, and yield abundant crops; the wet afford early pasturage and hay for wintering stock, and with little labour may be converted into excellent artificial meadows. The winters are long and often severe, but the atmosphere is more humid, and the climate, upon the whole, milder than that of the states more to the E. The soil is various, but there is a great deal of good land, especially in the S. Nearly all kinds of corn are raised, oats being the most abundant. Turnips and other field vegetables are a good deal grown. All kinds of garden vegetables and the fruits of temperate climates thrive with care, and many flourish wild. Hemp and flax have been recently introduced, and succeed well. Pasturage is good, but the live stock are generally inferior. Horses and mules are less employed than in the states more to the S., oxen being mostly used for field labour. Sheep are few, but hogs are very numerous. Large masses of native copper, lead, iron, bituminous coal, and gypsum are met with, and salt springs are both many and abundant.

The arts and manufactures of Michigan are limited, for the most part, to those of prime necessity. Grinding flour, sawing timber, distilling, carding wool, and making woollen cloth, are the principal branches of manufacturing industry. In summer, trade is carried on from the E. shore of the state with Ohio, Pennsylvania, and New York; but for 4 or 5 months of the year the navigation is closed by the ice. The state, however, is well accommodated by railways, the most important of the lines running across the S. portion from Detroit to N. Buffalo, at the SE. extremity of Lake Michigan.

The seat of government, formerly at Detroit, was removed to Lansing, Ingham co., in 1847. The legislative authority is vested in a senate of 32 mems. and a H. of Reps. of 100 mems.; the senators being elected every 2 years, and the representatives annually, by all the white male citizens above 21 years of age, who have resided in the state for 6 months preceding the election. The executive power is in the hands of a governor and lieutenant-governor, who are chosen by the people, and hold office for 2 years. Justice is administered in a supreme court, a court of chancery, 3 circuit courts, and inferior tribunals, established at the pleasure of the legislature. The judges of the supreme court are nominated by the governor, with the consent of the senate, and hold office for 7 years. In each of the circuits a court is held twice a year. The constitution provides that neither slavery nor involuntary servitude shall be introduced into the state, except for the punishment of crimes. A university was established at Ann Arbour, in 1837, which has 6 branches. Colleges have also been founded at Marshall and at St. Philip's, near Detroit; and a system for the foundation of primary schools has been adopted by the legislature. The state sends 6 members to congress.

Michigan was discovered and settled by the French, who founded Detroit in 1670. In 1763, this territory, with other possessions conquered from the French, became subject to Great Britain. In 1805, the Lower Peninsula was erected into a territorial government, distinct from the rest of the NW. territory; and, in 1836, Michigan with its present limits was constituted a state of the Union.

MICHIGAN (LAKE), one of the five great lakes of N. America, in the basin of the St. Lawrence, being the third in point of size and intermediate, in position, between Lakes Superior and Huron, with which last it communicates, at its NW. extremity, by the Straits of Michilimakinac. Unlike the other great lakes, it is wholly surrounded (except at the above strait) by the territories of the U. States; having N. and E. the state of Michigan, S. Indiana, and W. Illinois and Wisconsin. Its shape is an elongated oval. Its W. shore extends along the meridian of 88° W. long., thus giving it a width of from 80 to 100 m.; its length is about 360 m., and it has an area of about 26,000 sq. m. Its mean depth is estimated at 900 ft., or about the same as that of Lakes Superior and Huron; it is elevated 600 ft. above the tide level, being 14 ft. under the level of Lake Superior, and 4 ft. above that of Lake Huron. In general, it is remarkable for the absence of bays, harbours, and islands: on its NW. side, however, is Green Bay, an inlet of about 25 m. in width, accessible to vessels of 200 tons, near which are the Manitou and Beaver Islands. Lake Michigan receives numerous rivers on every side, but they are not very important. The countries all round the most southerly portion of this lake are rapidly settling; and it has already become the centre of a very extensive commerce, being connected by railway with Lake Erie and New York on the one hand, and by canal with the Mississippi and New Orleans on the other. The great and flourishing towns of Milnwaukie, Chicago, and Buffalo stand on its banks. The waters of this lake are clear and salubrious, and it abounds with fish. It is navigated by vast numbers of large steamboats, schooners, and brigs.

MIDDLEBURG, a town of Holland, prov. Zealand, of which it is the cap., nearly in the centre of the island of Walcheren, 4 m. N. by E. Flushing, and 47 m. SW. Rotterdam. Pop. 16,175 in 1861. Though no longer fortified, it preserves its circular mound of earth, divided into bastions and surrounded by a broad and deep ditch. The approaches to Middleburg are somewhat more varied than to most Dutch towns, the roads passing through a number of small plantations and country houses. It is nearly circular; some of its streets are wide and handsome, and the whole are tolerably regular. The market-place forms a spacious square, and part of the town is traversed by canals, crossed by draw-bridges. The whole is extremely clean; the private houses are uniform, and some of the public buildings capacious, particularly the town-house and the Oostkerk (east church); the former is in the Gothic style, and has several statues and paintings. The other objects most worthy of notice are several of the churches, a high spire, commanding a prospect over the whole island, the public walks along the bastions, and the Molenwater, an extensive reservoir or backwater. The chief literary institution is the athenæum, or academy, which affords nearly the same course of instruction as a university, but without the privilege of conferring degrees. It has also a Latin school; a school of design; the Zealand society of literature, arts, and sciences, which possesses a good library and collection of medals; and a society of agriculture.

Middleburg has manufactures of starch, glass, and paper, a cannon foundry, and several sawmills, and salt refineries. Though 4 m. from the sea, it has quays of considerable extent, and formerly had a considerable share in the Dutch E. India trade. Its other branches of commerce are the importation of wine, chiefly from Bordeaux, and the exportation of corn, brought to its market from the fertile tracts to the eastward of the island. It was the head-quarters of the British

Digitized by Google

army in the unfortunate expedition of 1809. Its atmosphere, like that of the rest of Zealand, is loaded with moisture, which tends to engender agues and bilious complaints, particularly in autumn.

Middleburg is of considerable antiquity, having been first surrounded with walls in 1132. It was taken by the Dutch from the Spaniards in 1574. In 1795 it was ceded to the French, under whom it was the cap. of the dép. Bouches-de-l'Escaut. It sends 8 deputies to the provincial assembly of Zealand.

MIDDLESBOROUGH, a munic. bor., river-port, and par. of England, N. riding co. York, hund. Langborough, on the Tees, about 3½ m. from its mouth, 16 m. E. by N. Darlington, and 215 m. N. London on the Great Northern railway. Pop. of bor. 18,992 in 1861, against 5,463 in 1841. This great increase of pop. is chiefly attributable to the rapid rise of its coal trade, consequent on the opening of the Stockton and Darlington railway from the collieries of S. Durham. The town chiefly consists of a main street facing the river, and of another wide avenue running at right angles to it. There are several other respectable streets; and, on the whole, the town is regularly and substantially built. The parish church, opened in 1840, is a neat Gothic structure, with a spire. The Wesleyan Methodists, Baptists, and Primitive Methodists and other sects have their respective places of worship, with attached Sunday schools.

Middlesborough, the site of which, about the year 1840, was occupied by a solitary farm-house, has already become the most considerable port of the Tees, though still regarded as subordinate to Stockton, from which it has taken most part of its coal-trade, and a large portion of its ship-building. Its rapid rise is owing to its convenient position near the bar of the Tees, and the spirited conduct of several wealthy coal-owners, who, in connection with other shareholders, built excellent staiths for loading colliers at the wharfs, and constructed a railway leading from it to the important coal-field near Bishop's Auckland, a distance of 32 m. The staiths, which are 450 yards in length, and worked by two large steam-engines, are capable of shipping 4,000 tons of coal *per diem*. Docks have been excavated, which comprise a water area of several acres. Steam tug-boats are constantly employed in bringing in and taking out vessels over the bar of the river; steamers run between this port and Sunderland and Newcastle, as well as to and from London. A number of ship-building yards and sail-cloth and rope manufactories are in active operation. On the 1st of January, 1864, there belonged to the port 9 sailing vessels under 50, and 49 above 50 tons, besides 24 steamers, of the aggregate burthen of 2,202 tons. The gross amount of customs' duties received was 617*l.* in 1861, 1,694*l.* in 1862, and 2,158*l.* in 1863. The commerce of Middlesborough, independent of coal, is important; and its inhabs. have distinguished themselves by their activity and industry.

MIDDLESEX, a co. of England, containing the greater part of the metropolis, having E. the river Lea, which divides it from Essex, N. the co. Hertford, W. Buckingham, and S. the Thames, which separates it from Surrey and Kent. It is one of the smallest of the English counties, comprising an area of but 281 sq. m., or 180,136 acres. The surface is various. The highest eminences are Hampstead, Highgate, and Harrow-on-the-Hill. In some parts along the Thames there are extensive tracts of rich loam, but the higher grounds are mostly gravelly and clayey, and not naturally fertile. There are numerous unenclosed commons in different parts of the co., and Hounslow Heath, on its SW. angle, is as poor and unimprovable a tract as can well be imagined. Contrary to what might have been expected, agriculture is but little advanced in this co.; and, although considerable improvements have been made, the implements and processes of husbandry are still very inferior. By far the largest portion of the co. is in grass, and the business of hay-making is as well understood here as in any part of the kingdom. The rich tract of land along the Thames from Kensington to Isleworth is principally occupied by market gardeners, who send a large supply of fruits and vegetables to the London markets. The cows kept for the supply of London with milk are all short-horned. Property is very much divided, and in several districts it is mostly portioned out into villas and pleasure-grounds; farms seldom exceed 200 acres, and their average size is supposed to be about 100. Leases common, and mostly for 14 and 21 years. Minerals of no importance; but in the vicinity of London in many places vast quantities of land have been dug up and converted into bricks. Middlesex is well watered: besides the Thames and the Lea, by which it is bounded, it is intersected and partly bounded on the W. by the Colne; and it is also intersected by the Brent, and by the Grand Junction canal. It is divided, exclusive of the metropolis, into 6 hunds. and 75 pars. It returns 14 mems. to the H. of C., viz. 2 for the co., 4 for the city of London, 2 for Westminster, 2 for the Tower Hamlets, 2 for Finsbury, and 2 for Mary-le-bone. Registered electors for the co. 14,847 in 1865. At the census of 1861, the county had 279,153 inhabited houses, with 2,206,485 inhabitants; while, in 1841, Middlesex had 207,629 inhabited houses, and 1,576,636 inhabs.

MIDDLETON, a manufacturing market town and par. of England, honor of Clitheroe, hund. Salford, co. Lancaster, 5 m. NNE. Manchester, and 165 m. N. by W. London, on the London and North Western railway. Pop. of town 9,876 and of par. 19,635 in 1861. The town, which in 1775 was an inconsiderable village, containing only 300 inhabs., has, owing to the extension of the cotton-trade, become a large place, with several good streets and well-built houses. The church, rebuilt in 1524, has a low tower, partly of wood, and some fine carvings and painted windows: the living is a rectory, in the gift of Lord Suffield, the lord of the manor. Within the par. are, also, several other churches and episcopal chapels, and places of worship for different denominations of dissenters, with attached Sunday schools. A free grammar school was founded in 1572; and, within the last few years, subscription schools have been formed for the education of the children of the working classes. The principal employments of Middleton are silk and cotton weaving, cotton spinning, calico and silk printing. The Rochdale canal, the Manchester and Leeds railway, and the Bolton railway pass through the par., and afford the greatest facilities for the conveyance both of passengers and goods. The town is governed by the county and manorial constables; and courts leet and baron are held twice a year. Markets on Saturday, 1st Monday after 10th March, ditto after 15th April, and 2d Thursday after 29th Sept.

MIDDLETON, a market town of Ireland, co. Cork, prov. Munster, at the confluence of the Curra and Lewis rivers, at the NE. extremity of Cork harbour, 14 m. E. Cork. Pop. 3,378 in 1861. Middleton, so called from being midway between Cork

Digitized by Google

and Youghal, has a par. church, a Rom. Cath. chapel and convent, an endowed grammar school, and 2 schools partially supported by the commissioners of education, a fever hospital and dispensary, a market-house, court-house, and bridewell. It has the advantage of being in the immediate neighbourhood of the harbour of Ballinacurra, where the merchants ship their commodities, especially flour and agricultural produce. The corporation, consisting of a sovereign, 2 bailiffs, 12 burgesses, and commonalty, returned 2 mems. to the Irish H. of C. till the Union, when it was disfranchised. Quarter sessions are held in June and Nov.; and it is a constabulary station. Markets on Saturday; fairs on the 14th Feb., 14th May, 5th July, 10th Sept., 10th Oct., and 22nd Nov. Post-office revenue, in 1830, 295*l.*; in 1836, 488*l.*

MIDDLEWICH, a market town and par. of England, hund. Northwich, co. Chester, at the confluence of the Dane and Croke, 18 m. E. Chester, and 151 m. NW. London. Pop. of town, 3,146, and of par. 4,752 in 1861. Area of par. (which comprises 14 townships), 13,330 acres. The town, though small, is neat and regularly built, its principal public edifices being a large church, three places of worship for dissenters, and a free school. Middlewich has long been celebrated for its brine-springs, the water of which is alleged to yield ¼ its weight of salt (muriate of soda). The manufacture of salt is the chief employment of the inhab., but some additional advantages have been derived from the introduction of the cotton trade.

Middlewich has an extensive internal navigation by means of the Grand Trunk canal, which passes through the town, and by a branch connecting the town with the Chester canal. It is distant 2½ m. from the Winsford station, on the Grand Junction railway, and 3½ m. from the London and North Western railway. Petty sessions are held here for the hund. of Northwich. Markets on Tuesday; cattle fairs, May 1, Holy Thursday, and Aug. 5.

MIDHURST, a parl. bor., market town, and par. of England, co. Sussex, hund. Eastbourne, and rape Chichester, near the Arun, 10 m. N. by E. Chichester, and 46 m. SW. London, on a branch line of the London, Brighton, and South Coast railway. Pop. of parl. bor. (which includes the entire pars. of Midhurst, Eastbourne, Heyshot, Chithurst, Graffham, Didling, and Cocking, with portions of pars. Steep, Bignor, Wool-Lavington, Bepton, Woolbeding, Lynch, Stedham, Sping, Trotton, Sellham, and Lodsworth), 6,405 in 1861. The town is small, but particularly clean looking, and has several good detached houses in its immediate neighbourhood. The church is a small stone building, with a square tower surmounted by a diminutive steeple: the living is a curacy in private patronage. A free grammar school was founded here in 1672, and there is a national and Sunday school for poor children of both sexes. Midhurst has very little trade, except in corn, large quantities of which are sold at its weekly markets. The surrounding district is entirely agricultural, though formerly iron works existed within a few miles of it.

Midhurst is a bor. by prescription, and sent 2 mems. to the H. of C. from the reign of Edward II. down to 1832, the right of voting being in the holders of burgage tenures. The Reform Act deprived it of one of its mems.; the electoral limits being, at the same time, so much enlarged as to include, in addition to the par. or old bor. of Midhurst, 6 entire pars., and portions of 11 others as above specified. Registered electors, 380 in 1865. Petty sessions are held here for the hund. of Eastbourn. Markets on Thursday; cattle fairs, 5th of April and 29th of Oct.

About ¼ m. E. of Midhurst, and close to the Arun, are the ruins of Coudry House, formerly the residence of the family of Montague, destroyed by fire, with its costly furniture, pictures, books, and objects of art, on the 24th Sept. 1793, the same day that its noble owner was drowned in an attempt to sail down the Falls of the Rhine at Schaffhausen.

Richard Cobden, one of the most enlightened of modern statesmen, was born at Dunford, near Midhurst, in 1804, and died here in 1865.

MIDNAPORE, a dist. of British India, presid. Bengal, properly belonging to the prov. Orissa, but which has long been attached to that of Bengal; principally between lat. 21° 40′ and 23°, and long. 86° and 88° E.; having N. the Jungle Mehals, E. the Hooghly distr. and river, S. Cuttack, and W. some zemindaries, tributary to the British. Area, 4,015 sq. m. A considerable portion of the surface consists of jungles, partially inhabited by a very low caste of Hindoos called *sontals*. The land is generally very fertile, and most part of the articles grown in Bengal are cultivated here; the people, however, are poor and depressed, and it is doubtful whether they ever enjoyed a much higher state of prosperity and civilisation than at present. Midnapore has some manufactures of fine calico and gauzes, but of late these have greatly declined. Chief towns, Midnapore, Jellasore, and Pipley.

MIHIEL (ST.), a town of France, dép. Meuse, cap. cant., on the Meuse, 20 m. NE. Bar-le-Duc. Pop. 5,467 in 1861. The town was formerly surrounded with walls, but these were demolished in 1635. It is well laid out, and has several remarkable churches, in one of which is a fine piece of sculpture, representing Christ laid in the sepulchre, the work of L. Richier, a pupil of Michael Angelo. It is the seat of the court of primary jurisdiction for the arrond. of Commercy, and of the court of assize for the dép.; and has a communal college, a public library, and manufactures of cotton cloth and yarn.

MILAN (Ital. *Milano*, Germ. *Mailand*, Lat. *Mediolanum*), the principal city of N. Italy, cap. of the prov. of same name, in a fertile and highly cultivated plain, between the Olona and Lambra, with which rivers it is connected by the *Naviglio Grande* and other canals, 150 m. W. Venice, and 79 m. ENE. Turin, on the railway from Turin to Venice. Pop. 186,154 in 1862. The city is nearly circular, and is surrounded, except on the NW., by a bastioned wall of little strength and broad ramparts, planted with trees, and about 10 m. in circuit. The area thus inclosed comprises, however, not only the city and its suburbs, but a number of gardens and orchards. The city-proper, or closely peopled part in the centre, is surrounded by a canal nearly 5 m. in circ. Like other old cities, it is irregularly laid out, and most of its streets are narrow and winding; but it has some noble thoroughfares, and is generally extremely well paved. Upon the whole, it is one of the finest and most pleasing cities of Europe. 'Milan,' says Von Raumer, 'stands in a sea of green trees, as Venice in a sea of green waters. In the latter city everything reminds you of the past, as the great and important period; here, on the contrary, the present is full of life, and all that belongs to antiquity is thrown into the background. Everything reminds one that Milan is a great central point of wealth and activity. No signs of decay, no unoccupied people, unless in the upper classes, where the possession of fortune invites to the *far niente*, which, in Venice, goes hand in hand with wretchedness and want. In Venice, and also in Verona, each house is built according to individual fancy or convenience, and the greatest variety of

Digitized by Google

architecture, and the most wanton deviations from all law, order, or harmony, are seen. In Milan, on the contrary, every building is perfectly symmetrical, and scrupulously kept in repair; and not the least symptom is to be seen of a poor or declining pop., so evident is everywhere the progress of improvement.' (Italy and the Italians, i. 100.)

The principal public edifice is the cathedral; an immense and imposing Gothic structure, inferior in size only to St. Peter's, Rome, and St. Paul's, London. It stands in the centre of a spacious square, nearly in the middle of the city, and is built wholly of white marble. It was begun by John Galeazzo, first duke of Milan, in 1385, but on so large a scale, that it is not yet quite finished; and, from having been continued by many different architects, of adverse tastes, it has a great admixture of styles. Its principal *façade* has a fine general effect; but it presents the incongruity of Grecian doorways and windows introduced into a Gothic front. The entire building is in the form of a Latin cross; its length internally is 493 ft.; width, 177 ft.; total length of the transept, 283 ft. 10 in.; height of the nave, 151 ft. 11 in.; height to the top of the lantern, 247 ft.; do. to the top of the spire and statue, 356 ft. There are 52 piers, 98 pinnacles, and, inside and out, no fewer than 4,400 statues. In fretwork, carving, and statues, it goes beyond all churches in the world, St. Peter's itself not excepted. 'Its double aisles, its clustered pillars, its lofty arches, the lustre of its walls, its numberless niches, all filled with marble figures, give it an appearance novel even in Italy, and singularly majestic.' (Eustace, Classical Tour, iv. 7, 8.) In this cathedral there is no screen, and the chancel is entirely open, and separated from the nave only by its elevation. Neither are there any chapels, properly so called; and the high altar stands, as in the Roman *Basilica*, and, indeed, in all ancient churches, before the choir, and between the clergy and the people. The pillars, or rather clusters of pillars, which support the vault, though above 90 ft. in height, are only 8 ft. in diameter, from which comparative thinness they scarcely conceal any part of the interior from the eye. The pavement is of different coloured marbles, disposed in various figures. The dome is surmounted by a tower and obelisk, which last was erected about the middle of the 18th century, adding, however, little to the beauty or magnificence of the edifice. On the top is the figure of the Virgin, to whom the church is dedicated. In a subterranean chapel immediately beneath the dome is the shrine, inclosing the remains of St. Charles Borromeo, archbishop of Milan in the 16th century, to which numerous pilgrims resort. On the whole the cathedral is, both internally and externally, overladen with ornaments; and there can be no doubt that the removal of 2,000 or 3,000 of its statues would be a signal improvement; but, with all its faults, it is certainly the finest Gothic edifice in Italy; and, in the opinion of some travellers, the finest church after St. Peter's.

Several other churches in Milan are worthy of notice. The first is that of St. Ambrose, the scene of many ecclesiastical councils and civil conflicts, and in which the German emperors usually received the Lombard crown. It is of high antiquity, and possibly some remains of the original edifice, erected by St. Ambrose towards the end of the 4th century, may form part of the modern building; but the bronze doors, and the court in front, surrounded by arcades, are acknowledged to belong to the 9th century; and the most ancient part of the building, having any character of architecture, appears to be of the same period. This church is divided by arcades into a nave and two aisles, and vaulted in nearly the same manner as the church of the Carthusians at Rome (the great hall of Diocletian's baths). Among its curiosities are the tombs of St. Ambrose and other saints, some Greek mosaics, old paintings in stucco, sarcophagi of considerable antiquity, and a large brazen serpent, said to be that fabricated by Moses in the wilderness. The churches of St. Victor, St. Mark, San Celso, St. Eustorgio, and the Madonne della Grazia, are among the handsomest or most remarkable in Milan, and some of them are adorned with rare works of art. The steeple of St. Gothard is a curious specimen of the architecture of the 14th century.

In the old Dominican convent is the famous *Cenacolo*, or 'Last Supper,' by Da Vinci. This magnificent work has suffered severely from damp and age, and also, as is alleged, through the wantonness of the French soldiers and prisoners when they were quartered in the building. But what better could be expected from common soldiers, when a superior of the convent did not hesitate to cut away the feet of the principal figure, that a doorway might be heightened! It occupies one side of the refectory, and is about 30 ft. in length, by 15 in height. It has been so often repaired and retouched, that it is now nearly in the condition of Sir John Cutler's silk stockings: three of the apostles' heads are said to be all that remains of the original work, and even they owe their colouring to the pencil of restorers. Morghen's admirable engraving gives now, perhaps, the best idea of the picture and of the genius of the painter. On the wall opposite the 'Last Supper' is a fresco, by Mototarra, an artist of the 15th century; more curious on account of its age than remarkable for beauty.

The Royal Palace (*Palazzo del Corte*), a noble structure fronting the square of the cathedral, was erected by the French on the site of the old Sforza palace. It has numerous spacious apartments, and some admirable frescoes by Appiani. The floors are beautifully inlaid, and some of the rooms are hung with Gobelin tapestry; but the magnificent paintings, representing the exploits of Napoleon, that formerly decorated the two large saloons, have been removed. The government, judicial, and archiepiscopal palace, the city-hall or mansion-house, the mint, and the custom-house and treasury, are among the other principal edifices. The large hospital (*Ospedale Grande*) is of much greater extent than Bethlehem Hospital in London; being about 880 ft. in length, by 360 ft. in depth, and inclosing several open courts. It is not remarkable for its architecture, but is under excellent regulations. It was founded by Francis Sforza in the 15th century, and was left by one individual 4,000,000 livres (about 120,000*l.*), and by another three-fourths of that amount. It is open to all applicants, whatever their country, religion, or disorder: attached to it is a dispensary, whence medicines are distributed to the poor *gratis*, on the specification of any physician. The most extensive building in Milan is, however, the Lazaretto, beyond the walls, also founded in the 15th century, for those infected with the plague. It consists of four ranges of building, about 1,200 ft. each in length, inclosing an area of more than 30 acres. The city abounds in charitable institutions, including several other hospitals, four asylums for poor children, two workhouses, and a government loan-bank.

One of the principal attractions of Milan, especially to strangers, is the famous *Teatro della Scala*. This, which is next to San Carlo at Naples, the largest in Italy, has 6 tiers of boxes,

Digitized by Google

exclusive of the pit, which accommodates 800 visitors. An English traveller, Mr. Simond, gives the following account of his visit to this theatre. 'The house, which is certainly very fine, exceeds perhaps any in Paris or London, and the full band in the orchestra filled it well. Soon, however, the flapping of doors, incessantly opening and shutting, the walking to and fro over that part of the pit which is without seats, and, above all, the universal chattering, overpowered the music. Disappointed in our expectations of hearing this, and finding our attention to what was passing on the stage altogether fruitless, we turned to the spectators, and observed that the boxes, which are little rooms very neatly fitted up, had, by degrees, filled with company; and the lights in some of them (for there were none in the house except the row of lamps on the stage) enabled us to see the people receiving company, taking refreshments, gesticulating in earnest conversation, and laughing. In those boxes where there were no lights, the company remained invisible, and a sort of *chiaro-scuro* pervaded the fore part of the house. But, when the ballet began, the general hubbub at once ceased, and heads suddenly popped out, cards and conversation being suspended to look at the dancing. This, though much inferior to that of Paris or London, evidently possessed attractions superior to those of music, which was no sooner resumed, after the ballet, than the noise began again as before. A box at the opera, holding 8 persons, of whom 4 only can see, costs 11 francs; and 3 additional francs are paid by each person for his ticket of admission.' There are 8 other theatres, 2 of which are open for performances in the daytime.

Milan has many spacious and extensive barracks, nearly all of which are in the W. suburbs. The largest, or *Caserna Grande*, occupies an area about 900 ft. in length by 700 ft. in width, having in front, and on either side the Foro (*Foro-Bonaparte*), an esplanade, planted with trees and laid out in elegant public walks. Behind the Caserna is a large open space, called the Place of Arms (*Piazza d'Armi*), from which the Simplon road opens by the *Arco della Pace*, one of the finest monuments erected in modern times. This arch, commenced in 1807 and finished in 1837, designed and principally completed by the Marquis Cagnola, is altogether of marble, richly adorned with statues and bas-reliefs. It is nearly 73 ft. in length, 42 ft. in depth, and 74 ft. in height, but to the summit of the principal statue is 98 ft. Four fluted Corinthian columns decorate either front; and on the top a bronze herald of victory stands at each angle; and facing the city is a colossal bronze statue of Peace, in a car drawn by 6 horses. On another side of the *Piazzi d'Armi* is the amphitheatre, built by the French in 1806, a poor imitation of the antique structures of the same kind. It is nearly 300 yards in length, by 168 in breadth, and is capable of accommodating 30,000 spectators. It may be made an amphitheatre, a circus, or a *naumachia*, for charioteers to drive, and athletæ to wrestle, and a navy to give battle on an ocean 4 ft. deep; for the area could be laid under water at pleasure. The walls of this counterfeit of Roman work are scarcely 25 ft. high; and their thin facing of stone, already giving way, shows the rubbish underneath. But the palace annexed to this circus is adorned with columns of red granite, of great size, and each made of a single block.

The private palaces of Milan have received little notice from travellers, but some have considerable elegance, as the Palazzo Belgioioso, formerly the villa of Napoleon, and afterwards the residence of Prince Eugene Beauharnois, the Serbelloni, Vitti, Marino, and Visconti palaces. Besides the *Arco della Pace*, the city is entered by 10 gates, of which the Porta Orientale is the richest and most remarkable.

Milan, though less striking in its general appearance than Turin or Genoa, is much richer in objects of varied interest, art, and science. The Ambrosian Library, founded in 1609 by Cardinal F. Borromeo, comprises 95,000 printed vols. and 15,000 MSS. Many of the latter are highly valuable, including the note-book of Leonardo da Vinci, some MSS. supposed to date as far back as the 4th century, containing fragments of Cicero's lost orations discovered by Mai. Attached to the library is a hall of painting, with several fine works by Titian, Da Vinci, Luini, Albano, &c., and sketches by Raphael, Pietro de Cortona, and Caravaggio. The *Brera*, formerly the principal establishment of the *Umilianti*, is now converted to the use of the Royal Academy of Arts and Sciences. It has a noble collection of pictures by almost all the first and second-rate masters of Italy, collections of casts and engravings, rooms for the exhibition of the produce of the useful arts, a well furnished observatory, a good library, and a botanic garden. Many of the private collections in art and literature are excellent; in the Trivulzio palace is a library of 30,000 printed vols. and many MSS., a considerable collection of coins, and many curious relics of antiquity.

Milan is the seat of the court of appeal and high criminal court of Lombardy. It is the residence of a delegate, and an archbishop's see; and has 2 lyceums, 6 gymnasiums, a teachers' seminary, a high female school, many primary schools, a deaf and dumb school, colleges of medicine, midwifery, veterinary surgery, and architecture, a military geographical institute, various societies of literature and agriculture, and a tribunal of commerce.

This city is the centre and most important emporium of the silk trade of Lombardy. Not only do the transactions of the Lombardo-Venetian provinces in silk centre here, but many of the neighbouring states either sell their silk in Milan, or remit it thither in transit to foreign countries; and this is the case, not for raw silk alone, but also for organzine and tram. English houses, in particular, frequently make their advances at Milan to the consignees of silk. The spinning and throwing of silk is also extensively carried on in the city and its immediate neighbourhood, and many of its throwing-mills have steam-engines. Velvets, silks, ribands, lace, cotton stuffs, carpets, artificial flowers, paper, goldsmiths' wares, glass, felt hats, leather, earthenware, and chocolate, are exclusively made in Milan, and it has a royal tobacco manufactory. In addition to silk Milan has an extensive commerce in rice and Parmesan cheese, and is, next to Venice, the largest book mart in Italy. As a place of residence it has the advantages of cheap and plentiful provisions, every facility for study and amusement, a well regulated police, and polite society. Among its drawbacks are the heats of summer and the fogs of the autumn; the climate is, however, considered healthy.

Mediolanum, supposed to have been founded by the Insubrian Gauls, was annexed to the Roman dominions by Scipio Nascica, *anno* 191 B.C. In the 4th century it held the rank of the sixth city in the Roman empire, and is one of the few in Italy which have survived the devastations of the Middle Ages, and brought down its celebrity to modern times. It retains, however, but few antiquities; the only good specimen of ancient Roman architecture remaining being a range of 16 beautiful Corinthian columns, with their architrave, before the church of San Lorenzo. In the

Digitized by Google

12th century, Milan was the capital of a republic, and it subsequently became the capital of a duchy, in the families of Visconti and Sforza. After the battle of Pavia it was held by Spain, until, in 1714, it was ceded to Austria. The French took it in 1796, and again in 1800, after the battle of Marengo. Under their government it was at first the capital of the Cisalpine republic, and from 1805 to 1814, it was the capital of the kingdom of Italy. Milan has given birth to many distinguished individuals, among whom may be specified the illustrious painter Leonardo da Vinci; the mathematican Cavalieri; Beccaria, the author of the celebrated treatise on Crimes and Punishments; Signora Agnesi, famous for her mathematical and scientific attainments; the poets Parini and Manzoni. There appears to be no foundation for the statement that Valerius Maximus was a native of Milan.

MILAZZO, or MELAZZO (an. *Mylæ*), a fortified sea-port town of Italy, on the N. coast of Sicily, prov. Messina, cap. canton, on the E. side of an elevated narrow promontory, at the bottom of a bay 25 m. W. by S. the Faro point of Sicily. Pop. 12,044 in 1861. Milazzo is divided into the upper and lower towns, both of which are irregularly built; and though it has a number of large edifices, none of them are remarkable. The churches, with the exception of that of St. Francis, are generally mean and the convents poor. The town is principally distinguished by its fortifications; being so strong by nature and art, that it may be regarded as the Gibraltar of Sicily. Besides subordinate fortifications, it has a citadel on the highest point of the promontory, 320 ft. above the sea, commanding the town and the port. Beneath it is a spacious grotto, called the Cave of Ulysses. The promontory is bounded on all sides by steep rocks, inaccessible from the sea; and might be easily rendered impregnable. In the lower town is the fountain of Mylas, one of those alluded to by Pliny (Hist. Nat., lib. xxxi. cap. 4), as existing in this part of Sicily, the waters of which (in consequence perhaps of the melting of snow) are most abundant in summer.

Milazzo is the residence of a military commandant. Its inhab. are occupied chiefly in the tunny fishery, and in the export of wine, silk, fruit, rags, soap, white and red argols, corn, olive, and linseed oils, and *vino cotto*; the last is a cordial made by boiling must with potash. Its trade is principally with Marseilles, Leghorn, and Genoa. Its bay is large and the water deep. Ships may anchor abreast of the town in from 10 to 25 fathoms stiff mud, about ¼ m. from the shore.

The Gulf of Milazzo (an. *Basilicus Sinus*), between the peninsula on which the town stands and Cape Rasaculmo, has been the theatre of some important naval conflicts. The first of these occurred *anno* 261 B.C., when the consul Duillius defeated a Carthaginian fleet, and showed his countrymen how to conquer by sea as well as by land. Another and far more important contest, which influenced indeed, in no small degree, the fate of the Roman world, took place in this gulf *anno* 31 B.C., when the fleet of the younger Pompey was entirely defeated, and all but destroyed, by Octavius Cæsar, or rather by his general, Agrippa. (Ancient Universal History, xiii. 459, 8 vo. ed., and the authorities there referred to.) A third action took place here in 889, between the fleet of the Saracens and that of the Greek emperor Basilius.

MILBORNE-PORT, a decayed bor., market town, and par. of England, co. Somerset, hund. Horethorne, on the Ivel, 28 m. E. by S. Taunton, and 108 m. WSW. London, on the London and South Western railway. Pop. of parish 1,814 in 1861. Area of par. 3,150 acres. The town, though considerably improved within the last few years, is very irregularly built, consisting chiefly of detached houses, and having the appearance of a mere village. An ancient guildhall stands in the High Street, and near it is the market-house, now converted into warehouses. The church, an ancient cruciform structure, is surmounted by a massive square tower, supported by two pointed and two simicircular arches: the living is a vicarage, in the gift of the Marquis of Anglesey. The Wesleyan Methodists and Baptists have likewise their respective places of worship, with attached Sunday schools. Milborne-port had formerly considerable manufactures of dowlas, ticking, and sail-cloth, but they have long ceased to exist. The glove-trade, however, was introduced here from Yeovil, but has not been thriving. The market is disused, but fairs are held for cattle and pedlery, June 5 and Oct. 25.

Milborne-port, which, at the time of the Norman Conquest, had a market and 56 burgesses, is a bor. by prescription, and sent 2 mems. to the H. of C., with some interruption, from the reign of Edward I. down to the Reform Act, by which it was disfranchised. It had been for a lengthened period a mere nomination bor.

MILDENHALL, a market town and parish of England, hund. Lackford, co. Suffolk, on the Lark, 33 m. NW. Ipswich, 63 m. NNE. London, and 79¼ m. by Great Eastern railway. Pop. of par. 4,046 in 1861. Area of par. 13,710 acres. The town is of considerable extent and well-built, consisting of several detached streets, or *rows*, that form, as it were, a series of little villages. The church is a large and handsome structure, with a rich carved roof and lofty tower: the living is a vicarage, in the gift of Sir H. Bunbury, the chief landowner of the par. The inhabs., with the exception of a few retail traders, are chiefly engaged in agricultural pursuits. Petty sessions for the hund. are held here. Markets on Friday; fair for wool, Oct. 10.

MILETUS (Gr. Μίλητος), a once famous, but now ruined, city of Asia Minor, the cap. of Ionia, near the mouth of the Mæander (hod. Mendere), 65 m. S. Smyrna. This is a very ancient city, and had borne several names before it received that of Miletus, given to it by Neleus, son of Codrus, king of Athens, who conducted thither a colony of Ionians, *anno* 1120 B.C. Few cities have been more celebrated for their population, wealth, commerce, and civilisation. The citizens of Miletus early distinguished themselves by their skill in navigation, and still more by the number of the colonies they had established along the coast of the Hellespont, the Propontis, and the Euxine, which enabled them to engross the greater part of the trade in slaves, which, in antiquity, were principally furnished by the country round the Euxine, as well as the trade in corn, fish, and furs. She was also famous for her numerous works of art, the magnificence of her festivals, and the luxury, refinement, and opulence of her people. Among her most illustrious citizens were Thales, one of the sages of Greece; Hecateus, one of the most ancient historians; the philosophers Anaximander and Anaximenes; Cadmus, the first who wrote in prose; and Timotheus, a famous musician and poet. She also gave birth to Aspasia, the most accomplished and celebrated of courtezans; and Venus had nowhere more numerous and beautiful priestesses. Miletus was, in fact, the Athens of Ionia: '*urbem quondam Ioniæ totius belli pacisque artibus principem.*' (Mela, lib. i. cap. 17.)

Near the *Posideum Promontorium* (hod. Cape

Digitized by Google

Arbora), about 12 m. S. by W. Miletus, was an oracle and splendid temple of Apollo, surnamed Dindymæus. This temple, having been burnt down by Xerxes, was rebuilt on a still more magnificent scale by the Milesians. Part of the ruins yet remain; and the columns are so exquisitely fine, the marble mass so vast and noble, that it is impossible, perhaps, to imagine greater beauty and majesty of ruin. Miletus had also within her territory Mount Latmos, famous for the loves of Endymion and Diana; and the fountain Byblis, so called from the unhappy sister of Apollo, who here expired of love and grief. (Ovidii Met., lib. ix. lin. 454, &c.)

At present Miletus is a mean deserted place, which still, however, bears the name of Palat, or Palatia, *the Palaces*. The principal existing memorial of ancient grandeur is a ruined theatre, which must, when entire, have been a magnificent structure. It is 457 ft. in front, and is visible at a great distance. The site of the ancient city is encumbered with heaps of rubbish, and overrun with thickets, interspersed with fragments of walls, broken arches, fallen columns, and pedestals. It is evident, from the remains of a number of mosques, that Mohammedanism had once flourished here: but, with a single exception, the ruins seem to have belonged to mean and paltry structures.

In antiquity, Miletus underwent many vicissitudes. Having joined in the revolt of the Ionian cities, she was besieged and taken by the Persians, in the reign of Darius Hystapes, anno 493 B. C., when the inhab. were obliged to evacuate their city. But being afterwards allowed to return, Miletus again rose to great wealth and distinction. She opposed a vigorous resistance to Alexander the Great; but, instead of punishing, the conqueror magnanimously restored the city to her ancient freedom. She appears to have been indulgently treated by the Romans; and continued to be a considerable city, till she fell under the sway of the Turks, who first sacked, and subsequently destroyed, this ancient glory of Ionia. To complete her misfortune, the port is now almost filled up.

The government of Miletus, and of the other cities of Ionia, was usually popular and republican; but, like their mother cities, they were distracted by faction, and frequently subjected to oligarchs or tyrants. Of the Milesian tyrants, the most celebrated was Thrasybulus, whose answer to the inquiry of Periander of Corinth may be seen in Aristotle's Politics, lib. iii. cap. 10.

Miletus and the principal states of Ionia, including the islands of Chios and Samos, being connected by the ties of a common origin and interest, were in the habit of sending deputies to a general council or assembly, to debate and determine upon measures for promoting their union and security. This council met at Panionium, so called from the circumstance, on the N. side of Mount Mycalé, opposite Samos, about midway between Ephesus and Miletus; the place was regarded as sacred, and was put under the especial protection of Neptune, the chosen guardian and favourite divinity of the Ionians. '*Ibi est Panionium, sacra regio, et ob id eo nomine appellata, quod eam communiter Iones colunt.*' (Mela, *ubi supra*; see also Pliny, Hist. Nat., lib. v. cap. 19; and Herodotus, lib. i. cap. 148.) Thales, who saw that, without a more intimate union, the Ionians could make no effectual resistance to foreign aggression, advised his countrymen to establish a really federal system of government, and to concert and execute their public measures in common. (Herod., lib. i. cap. 170.) But this judicious advice was not acted upon; and it was only on urgent occasions, such as the invasion of Ionia by the Persians, that a sense of common interest and danger prevailed over their mutual jealousies and antipathies, and made any considerable number of the cities act in unison.

Most commonly the debates and decrees of the assembled deputies seem to have referred only to matters connected with religion, precedence, or ceremony. This appears evident from the circumstance of the deputies meeting at Panionium, when the Ionian cities were subject to the Persians and others, as well as when they were independent. (Herodotus, lib. i. caps. 142, 143, 148, &c., and lib. vi. caps. 18 and 21; Strabo, lib. xiv.; Chandler's Travels in Asia Minor, caps. 42, 43, and 45.)

MILFORD HAVEN, an extensive basin, or inlet of the sea, deeply indenting the S. part of the co. Pembroke, in S. Wales, and forming one of the most capacious and safest asylums for shipping in the British dominions. St. Anne's Head, forming the NW. extremity of the entrance to the Haven, lat. 51° 41′ N., long. 5° 10′ 25″ W., is 145 ft. in height, and is surmounted by two light-houses with fixed lights, respectively 15 and 45 ft. in height. The entrance is about 1½ m. in width; what may be called the Haven is from 10 to 11 m. in depth; but it branches out into an immense number of deep bays, creeks, and roads. The water is deep; and, being completely land-locked, and the anchorage-ground of the very best description, ships ride within the Haven as safely as if they were in dock. At springs, the tides rise from 23 to 30 ft., affording unusual facilities for the repair of ships, enabling them to get to sea with comparatively little difficulty, and to sail in even though the wind should be contrary. It may be entered without a pilot as well by night as by day.

MILFORD TOWN, a parl. bor. and sea-port town of England, South Wales, co. Pembroke, on the N. side of Milford Haven, 6 m. W. by N. St. Anne's Head. Pop. 3,007 in 1861. The town was founded in 1784. It is finely situated, is especially remarkable for the mildness of its climate, and has some good buildings, including a handsome church. A dockyard constructed here in 1790 has, however, been removed to Pater-Dock, on the S. side of the haven, and the town has not increased in the degree that was anticipated. It has a custom house, observatory, market-house, quay, with shipbuilding, trade in ship stores, and exports of stone, coal, and lime. On the 1st of Jan., 1864, there belonged to the port 73 sailing vessels under 50, and 57 above 50 tons, besides 1 steamer of 28 tons. Gross amount of customs duties received, 655*l.* in 1863. The bor. unites with Pembroke, Tenby, and Wiston in returning one member to the House of Commons.

MILHAU (an. *Æmilianum*), a town of France, dép. Aveyron, cap. arrond., on the Tarn, 30 m. SE. Rodez. Pop. 12,636 in 1861. The town is generally well built, and its streets, though narrow, are regular. It has several squares and public fountains, and a good bridge over the Tarn. Few vestiges exist of its ancient castle and walls; the latter were demolished by Louis XIII. in 1629. It produces woollen cloth, leather and leather gloves, silk twist; and has a considerable trade in cheese, timber, cattle, wool, almonds, wine, and other agricultural products. It is the seat of a court of primary jurisdiction, a tribunal and a chamber of commerce, a communal college, and society of agriculture. It was one of the strongest holds of the Calvinists in the French religious wars.

MILLEDGEVILLE, a town of the U. S. of N. America, state Georgia, of which it is the cap., and seat of government, on the Oconee, at the head of the steam-boat navigation. Lat. 33° 6′ N., long. 83° 20′ W. Pop. 4,295 in 1860. Its state-house,

Digitized by Google

penitentiary, and arsenal are large and conspicuous buildings; and it has several churches, academies, and printing-offices. It is a place of deposit for cotton, and has some trade; but in this respect it has been in a great measure superseded by Macon, a village about 30 m. SW.

MILO (an. *Melos*), an island of the Archipelago, belonging to Greece, in the group of the central Cyclades, the summit of Mount St. Elias; in its SW. angle, 2,036 ft. above the sea, being in lat. 36° 40′ 28″ N., long. 24° 23′ 14″ E. Pop. 3,800 in 1861. This island is said by Pliny to be circular (*Omnium rotundissima*, lib. iv. cap. 12); but it is really of an oblong shape, being about 13 m. in length from E. to W., and where broadest about 7 m. across: it is indented on its N. side by a spacious bay, stretching NW. and SE. about 6 m., which has deep water throughout, and forms one of the best asylums for shipping in the Levant. This island is obviously of volcanic origin: Mount Calamo, indeed, is still a semi-active volcano, emitting smoke and sulphureous vapours; in many places the earth is hot, and there are numerous hot springs, one of which, in a natural grotto, is used by the natives as a sudatory. It also furnishes abundant supplies of iron, alum, sulphur, and salt.

A considerable portion of the surface is rugged and mountainous, and has a naked and sterile appearance; but the valleys and low grounds are extremely fertile, such small portions of them as are cultivated producing corn, wine, oil, cotton, oranges, and other fruits in the greatest profusion. However, Milo is now almost depopulated, and nearly a desert; a result to be ascribed to the ravages of the plague, the badness of the water, which is generally brackish, and the prevalence of malaria. Milo, the capital, situated near the bottom of the bay, is rendered unhealthy from the vicinity of salt marshes, and is an inconsiderable wretched place.

Castro, another town, near the entrance to the harbour, on its E. side, is built on the summit of a conical hill, the houses appearing to rise above the roofs of each other. A little to the SW. of Castro, near the shore, are the ruins of the ancient city. The remains of a theatre, built of large masses of the finest marble, and fragments of solid walls have been discovered. In the vicinity are numerous catacombs, cut in the porous rock.

Melos is said by Thucydides to have been independent 700 years before the Peloponnesian war. The most probable opinion seems to be, that the Melians were descended from the Lacedæmonians; but, however that may be, they declined taking any share in that contest, and though pressed by the Athenians to espouse their cause, declared their neutrality. The Athenians, however, having the command of the sea, determined to coerce the Melians into submission to their mandates; and though the first expedition sent against them failed of its object, the second was more successful. Thucydides, gives the substance of the speeches made by the Athenian commanders to the Melians previously to their commencing hostilities; and on no occasion has the robber's plea, that whatever the powerful may please to command, the weaker are bound to obey, been more broadly and unequivocally asserted. The sequel of their conduct was worthy of the principle thus laid down; for the Melians having, after a stout resistance, surrendered at discretion, the Athenians put all the full-grown males to the sword, and carried the women and children to Attica, where they were sold as slaves. This atrocity was perpetrated shortly before the Athenians engaged in their expedition against Syracuse; and is related by Thucydides, without note or comment, as if it had been a legitimate and ordinary occurrence. (Thucyd., lib. vi. *ad finem.*) The fortune of war having, however, soon after turned against the Athenians, the captive Melians were restored to their native country, and the island continued to be comparatively prosperous till, after innumerable vicissitudes, it was seized upon by the Turks, who reduced it to an abject state. It is now included in the kingdom of Greece.

MILTON, or MILTON ROYAL, a fishing town and par. of England, lathe Scray, co. Kent, hund. its own name, 11 m. NE. Maidstone, and 36 m. E. by S. London, on the North Kent railway. Pop. 2,731 in 1861. The town, on the declivity of a hill sloping down to a creek which opens into the channel between the Isle of Sheppey and the coast of Kent, is old and irregularly built. It has a market-house and shambles near its centre, and at its N. end is an old court-house. The church, which stands at a considerable distance from the present town, is a spacious fabric, with a square tower of flint stone laid in even rows. The living is a rectory, in the gift of the dean and chapter of Canterbury. There are places of worship, also, for Wesleyan Methodists and Baptists, with attached Sunday schools: a free school was founded in 1718.

Milton has, for many centuries, almost entirely depended on its oyster fisheries, the produce of which is highly esteemed, and distinguished as the 'Milton natives.' The right of the fishery, within certain limits, formerly belonging to the abbey of Faversham, and afterwards to the crown, is now held on lease from the lord of the manor by a company of free dredgers, composed of the principal fishermen. The town has four wharfs, and, besides oysters, considerable quantities of corn and farm produce are shipped for the London market. Both the town and port are under the jurisdiction of a portreeve, elected annually by the inhabs. paying poor's rates.

Milton disputes with Richborough the honour of having furnished the Roman epicures with the oysters alluded to by Juvenal:—

> 'Rutupinove edita fundo
> Ostrea.' Sat. iv. 141.

MILVERTON, a market town and par. of England, co. Somerset, hund. its own name, 6½ m. W. Taunton, and 139 m. WSW. London. Pop. of par. 1,895 in 1861. Area of par. 6,400 acres. The town, situated in a richly-wooded and well-cultivated country, is small and ancient, consisting chiefly of three irregular streets, with the church, a large building, standing on an eminence in the centre. An extensive manufacture of serges and flannels is carried on here. Milverton was formerly a bor., and is still governed by a portreeve, appointed by the lord of the manor. Petty sessions for the hund. are held here. Markets on Friday; cattle fairs, Easter Tuesday, July 25, and Oct. 10.

MILWAUKIE, a town and harbour of the U. States, state Wisconsin, cap. co. same name, at the mouth of the Milwaukie river, on the W. shore of Lake Michigan, 80 m. N. Chicago. Pop. 45,250 in 1860, against 20,061 in 1850, and 1,702 in 1840. The town is rapidly rising in importance, and being the only good harbour on the W. side of the lake, between Chicago and Green Bay, it will most likely become the principal emporium of the territory in which it is situated. It has already a very extensive trade, and steamers ply between it and Buffalo, at the E. extremity of Lake Erie. It is well-built, has a court-house, jail, and land-office for the U. States, with numerous churches, schools, and academies.

Digitized by Google

MINCHIN-HAMPTON, a market town and par. of England, co. Gloucester, hund. Longtree, 12 m. S. by E. Gloucester, and 89 m. W. by N. London. Pop. of par. 4,147 in 1861. Area of par. 4,880 acres. The town, on the W. escarpment of the Cotswold Hills, consists of a long irregular street, extending N. to S. along the road from Gloucester to Chippenham, and crossed by another leading to the par. church, near the market-house. The church is a large cruciform structure, surmounted by an octagonal embattled tower, rising from the intersection of the nave and transepts: the living is a rectory in private patronage. The Wesleyan Methodists and Baptists have also places of worship, with attached Sunday schools; and there is a well attended national school, for children of both sexes, besides a respectably endowed grammar school. Minchin-Hampton, which is only 4 m. SE. of Stroud, the centre of one of the largest clothing districts of the co., has numerous cloth-factories on the banks of the brooks in the vicinity. Trade, however, has for some years been on the decline, and its fluctuations have caused great distress among the weaving pop. Markets on Tuesday: fairs for cattle, horses, and cheese, Trinity-Monday and Oct. 29.

MINCIO (an. *Mincius*), a considerable river of N. Italy, which has its source in the Lago di Garda; and which, flowing S., with many windings, by Mantua, unites with the Po 12 m. SE. that city. In the upper part of its course, till it approaches Mantua, it is rather rapid; but from near Mantua to the Po it has a sluggish current, and is navigated by the boats that ply on the latter. Virgil, who first saw the light on the banks of this river, has celebrated its praises:—

'———— tardis ingens ubi flexibus errat
Mincius, et tenera prætexit arundine ripas.'
Georg., lib. iii. line 14.

MINDEN, a strongly fortified town of Prussia, prov. Westphalia, cap. reg. of its own name, on the Weser, here crossed by a bridge 600 feet in length, near the Hanoverian frontier, 60 m. ENE. Munster, on the railway from Cologne to Berlin. Pop. 15,453 in 1861, excl. garrison of 2,952. The town is irregularly built, and has no remarkable edifice, except a handsome cathedral, and good barracks. Minden has a gymnasium or college, a normal school, an orphan asylum, four hospitals, and other public institutions, and is the seat of a court of justice for the town and district, and of a board of taxation; but the court of appeal for the regency is at Paderborn. Manufactures considerable: consisting of woollens, stuffs, linen, hosiery, hats, gloves, tobacco, soap, and refined sugar. A number of saw-mills are employed in the preparation of the wood brought down the Weser, and it enjoys a considerable share of the transit trade on this river between Bremen and Prussian Westphalia, and Hesse-Cassel. In the neighbourhood are coal mines and salt springs, both very productive. The fortifications of Minden have been much improved since 1815. This town was the residence of several early German emperors, and various diets were held in it.

The French were defeated in the vicinity of Minden in 1759, by the Prussians under Prince Ferdinand, brother to Frederick the Great, and the British under Lord George Sackville. The non-compliance of the latter with the orders of the former is said to have saved the French from a complete rout, and gave rise at the time to a great deal of acrimonious discussion.

MINEHEAD, a sea-port, decayed bor., and market town of England, hund. Carhampton, co. Somerset, on the Bristol Channel, 20 m. NW. Taunton, and 149 m. W. by S. London. Pop. of par. 1,582 in 1861. Area of par. 3,780 acres. The town comprises 3 distinct masses of building, forming a triangle, the sides of which are about ¼ m. long; the best part, which contains some good houses and inns, being about ½ m. from the sea. The church, which is large and handsome, stands on the slope of a hill N. of the town: there is also a place of worship for Wesleyan Methodists, and a well-attended Sunday school. A free school for 30 boys is supported by the lord of the manor, besides which there are several bequests of money charities for the relief of the poor. Minehead formerly had a considerable share in the herring fisheries, and had a large trade with Ireland, as well as with the Mediterranean and N. America. Its consequence, however, as a port, has greatly declined, notwithstanding its commodious harbour and pier. But it has lately been much frequented as a watering-place, and the inhabs. are at present mainly supported by the influx of visitors. Minehead received its charter of incorporation in 1 Eliz., from which time down to the Reform Act, by which it was disfranchised, it returned 2 mems. to the H. of C., the right of election being vested in the resident housekeepers in the pars. of Minehead and Dunster.

MINESOTA, a state of the North American republic, having N. the British possessions, from which it is separated in part by the parallel of 49° N. lat., E. Lake Superior and the state of Wisconsin, S. Iowa, and W. the Nebraska territory. Area 83,531 sq. m.; pop. 173,855 in 1860. Its central table land, though only about 1,700 ft. above the level of the Gulf of Mexico, contains the sources of the 'King of floods,' the Mississippi, flowing S., and of the Red River, flowing N. to Lake Winnipeg. It is extremely well watered, and has a greater number of lakes than any other state or territory of the Union. It has every variety of soil; and while in parts it is covered by extensive forests, in others it has large tracts of prairies and open lands, with swamps and morasses. It is peculiarly well fitted for the raising of corn and of cattle, but very little is known of its mineral products, except that it has lead mines. Capital, St. Paul, immediately below the falls of St. Anthony, on the Upper Mississippi, and 219 m. within the territory. The climate in winter is severe; but, though followed by a hot summer, it is anything but unhealthy. The government is vested, like that of the other states of the Union, in a governor, senate, and house of representatives, all chosen by universal suffrage. The number of senators in 1864 was 21, and of representatives 42. The debt of the state amounted, in 1864, to but 350,000 dollars. Minesota was organised as a territory, March 3, 1849, and was admitted into the Union as a state in 1857. It sends 2 mems. to the Congress of the United States.

MINORCA (*Balearis Minor*), the second in size of the Balearic Islands, belonging to Spain, in the Mediterranean, off the E. coast of Spain, from which it is distant about 140 m., Mahon its cap. being in lat. 39° 51′ 10″ N., long. 4° 18′ 7″ E. It is of an oblong shape, extending from WNW. to ESE., but somewhat concave on its S. side. Length, 32 m.; average breadth, 9 m. area, 260 sq. m. Pop. 39,005 in 1857. The coast is indented on every side, but particularly on the N., with small bays or deep creeks, and is surrounded with islets, rocks, and shoals. Surface very uneven, with abrupt hills and knolls; but there are no mountains, except El Toro, near its centre, which rises 4,793 ft. above the sea. Iron, lead, and copper have been found, though in

Digitized by Google

too small quantities to be wrought; but marble is extremely abundant, and of many beautiful varieties, as is seen in the churches and houses of Port Mahon. Water is scarce, and the climate is less mild and agreeable than that of Majorca. The air in winter is damp and raw, owing to the frequency of N. winds; but snow is seldom seen. The temperature during spring is mild, and the air pure, though somewhat moist; the summer heat is very oppressive, and the autumn is remarkable for its frequent and heavy rains. The soil is in most parts poor, sandy, and unproductive; but on the hill sides are several fertile tracts, on which good crops of corn and wine are raised with little labour. Excepting a few evergreen oaks near the centre of the island, Minorca is almost destitute of trees; a circumstance attributable partly to the devastations of war, and partly to the violent N. winds, which are extremely injurious to plantations. Wheat and barley are the grains chiefly cultivated; both being of middling quality, and scarcely sufficient to supply two-thirds of the consumption of the island. Red and white wines are made in large quantities, and about 10,000 arrobas a year are exported, but the olive will not thrive in consequence of the cold N. winds. Capers grow spontaneously, and form an important article of export. Flax, hemp, saffron, and the cotton plant succeed well, but are little attended to. Fruits of various kinds are abundant, though much inferior in flavour to those of Majorca. Vegetables, also, are plentiful, and of good quality. The island is well suited for pasturage, and is well supplied with cattle, sheep, goats, and mules: wool is exported in considerable quantities; and the cheese of Minorca is considered by the Italians as equal, if not superior, to Parmesan. Bees, also, are reared in great abundance, and furnish large supplies of excellent honey and wax. Partridges, quails, and other game are plentiful. Lizards swarm; and there are several varieties of venomous reptiles, but no beasts of prey. Fish, especially anchovies, abound on the coast, and the oysters of Minorca are held in high estimation by the Catalonians.

The trade of Minorca, chiefly carried on at Port Mahon, consists in the export of wine, wool, cheese, capers, honey, and wax, chiefly to Spain, but also to Genoa, Leghorn, and the ports of France. The imports comprise wheat, oil, linen, cotton and woollen fabrics, wood, tobacco, and a variety of manufactured goods and colonial products from Spain, France, and Italy. The possession of Minorca by the British during the greater part of last century did something to awaken a spirit of activity and enterprise among the inhabitants. Since its restoration to Spain, however, its industry and commercial importance have greatly declined. Accounts are kept in Spanish money, but some of the inhab. still retain the English mode of accounting.

'The inhab. of Minorca,' says Fischer, 'are ardent, courageous, ingenious, and make excellent sailors. That activity of mind which distinguishes the Mallorcans, they possess, perhaps, in a still higher degree; for they are extremely lively, sociable, and even convivial. As the climate and soil of Minorca are greatly inferior to those of Majorca, the people of the former island are much less opulent than the Mallorcans; but they bear a close affinity to each other in language, manners, and religion.' (Pict. of Valencia, p. 289.) They are enthusiastically fond of religious processions, and are as bigoted and ignorant as possible. Dancing and playing on the mandolin are their chief amusements. The modern inhab. are said to be as expert as their ancestors in the use of the sling.

Minorca is divided into the four districts, or *terminos*, of Mahon, Alayor, Mercadel, and Ciudadel, which are the names also of the four largest towns. Mahon, the cap. (an. *Portus Magonis*), at the E. end of the island, with a pop. of 13,588 in 1857, is, on the whole, well built, chiefly in the English style; but the older streets are narrow, crooked, and badly paved. The harbour is one of the best and most capacious in the world. Three large squadrons have, more than once, been at anchor in it at the same time, and there is excellent mooring ground in five and six fathoms, sheltered from every wind. It has three rocky islets: on one stands a hospital, on another the lazaretto, and on the third is an arsenal, with naval store-houses, all built by the English. Ciudadela is the ancient capital, but its pop. is not above 8,000. The other places in the island are mere villages.

The ancient history of Minorca is nearly identical with that of Majorca. In 1285 the Moors were finally expelled from both islands, which were then formally annexed to the crown of Arragon. In 1708, during the war of the Spanish succession, the English took possession of the island, with the intention of making it a naval station. It was confirmed to the British by the peace of Utrecht, and remained in their possession till 1756, when it was taken by a French fleet and army, after the failure of the attempt to relieve it by Admiral Byng, which led to the memorable trial and death of the latter. At the peace of 1763 Minorca was restored to Great Britain, but in 1782 it was retaken by the Spaniards. It was once more taken by the British in 1798, and was finally ceded to Spain at the peace of Amiens in 1802

MINSK, a government of Russian Poland, comprising the former palatinate of Minsk, and portions of the palatinates of Polock, Wilna, and Novogrodek. It is principally included between the 52nd and 56th degs. of N. lat., and the 26th and 30th of E. long., having N. and E. the govs. Witepsk and Moghilev, S. Kief and Volhynia, and W. Grodno and Wilna. Area, 42,000 sq. m. Pop. 986,471 in 1858. Surface mostly level, but in the N. a chain of hills separates the waters flowing towards the Black Sea from those that fall into the Baltic. In the S. is a large extent of marsh land, along the banks of the Pripet. Exclusive of this river and the Dniepr, the other principal rivers are their affluents, the Beresina, Styr, Gorin, and Pechiza: the Dwina forms, for a short distance, the N. and the Niemen the W. boundary of the government. There are a number of small lakes, and in spring a great portion of the country is inundated, so as to form a vast sheet of water. Though one of the poorest and worst cultivated parts of the empire, Minsk produces more corn, principally rye, than is required for home consumption. Hemp and flax are important products, as are potash and tar. The forests are very extensive; and, next to agriculture, sawing and trading in timber is the principal occupation of the pop., and numerous large rafts are floated down the rivers to Kherson on the one hand, and to Riga and Konigsberg on the other. The rearing of live stock is mostly ill-conducted; pasturage is good in some parts, but the sheep yield only inferior wool. A great many bees are reared. Some little iron is obtained. Linen weaving and distilling are general; a little woollen cloth is made; there are some iron forges and glass factories; and at Pinsk, in the S.W., Russia leather is prepared. The trade of the gov. is chiefly con-

Digitized by Google

ducted by strangers. Only one-half of the children are receiving public instruction, and there are but five printing establishments in the gov. Chief towns, Minsk the cap., Boubronish, and Sloutsk.

MINSK, a town of Russian Poland, cap. the above government, and one of the largest in Lithuania, about 400 m. WSW., and 150 m. W. by S. Grodno. Pop. 24,130 in 1858. The streets of the town are narrow, irregular, and dirty, and its houses nearly all of wood; but the town has, upon the whole, a respectable appearance, and some good buildings, among which are several Greek, Greek-united, and Rom. Cath. churches, a synagogue, a gymnasium founded in 1773, and a handsome theatre. It is the see of a Greek archbishop, and a R. Catholic bishop, and has manufactures of woollen cloths, hats, and leather. Under the Poles, Minsk was the cap. of the palat. of same name.

MIRANDOLA, a town of N. Italy, prov. Modena, cap. cant., on the Burana, 18 m. NNE. Modena. Pop. 12,270 in 1862. The town is walled, and has a castle, but its fortifications have fallen into decay. Among its principal edifices are a handsome cathedral and numerous churches, a hospital, and a palace belonging to the Cico family. It has manufactures of silk stuffs and twist, and woollen and cotton yarn, and an active trade in these articles, and in rice, a good deal of which is grown in the neighbourhood.

MIRECOURT, a town of France, dép. Vosges, cap. arrond., on the Madon, a tributary of the Moselle, 16 m. NW. Epinal, on a branch line of the railway from Paris to Strasbourg. Pop. 5,533 in 1861. The town is ill-built, and has no remarkable public edifice: it is, however, the seat of tribunals of original jurisdiction and commerce, and has a public library of 6,500 vols. It is principally noted for its manufactures of violins, guitars, barrel organs, and other musical instruments, which occupy most part of the male pop., while the females are employed in making lace.

MIREPOIX, a town of France, dép. Ariège, cap. cant., on the Lers, a tributary of the Ariège, 15 m. NE. Foix. Pop. 4,189 in 1861. The town is well built and clean, and has a large hospital, a par. church, a town-hall, and a bridge over the Lers, all handsome structures. Its inhabs. manufacture coarse woollen and cotton cloths.

MIRZAPORE, a distr. and town of British India, presid. Bengal. The district is included in the prov. of Benares, and is in about lat. 25° N., and between long. 82° and 83° E. Area 5,235 sq. m.; pop. 1,104,315 in 1861. The cap., Mirzapore, is on the Ganges, 30 m. SW. Benares. Lat. 25° 10′ N., long. 83° 35′ E. It has numerous handsome European and native houses, Hindoo temples and ghauts, and is the chief mart for silk and cotton goods in the British middle provs. Cotton stuffs and carpets, of a superior kind, are made here; and there are some iron works in the vicinity.

MISKOLCZ, a large market town of Hungary, co. Borsod, of which it is the cap., on the great road from Pesth to Upper Hungary, 22 m. NE. Erlau. Pop. 17,913 in 1858. The town is well built, and has numerous churches, a Protestant and a R. Catholic gymnasium, a Greek national school, a synagogue, and a Minorite convent. The wine grown in the vicinity is the chief article of traffic at Miskolcz.

MISSISSIPPI, one of the U. States of N. America, in the SW. part of the Union, between the 30th and 35th degrees of N. lat., and the 88th and 91st of W. long., having N. Tennessee, E. Alabama, W. Arkansas and Louisiana, and S. the last-named state and the Gulf of Mexico. Length, N. to S., 335 m.; average breadth, about 140 m. Area 47,156 sq. miles; pop. 791,305 in 1860. North of lat. 31° the W. boundary is wholly formed by the river Mississippi; the country along which is a continued swamp, occasionally interspersed with patches sufficiently elevated to admit of cultivation. From this low plain the surface gradually rises towards the E., where a tract of moderately high land, stretching from SW. to NE., forms the watershed between the rivers joining the Mississippi in this state, and those flowing separately into the Gulf of Mexico. Many other hill ranges, of no great height, traverse the state, giving to the greater part of it an undulating surface. Next to the Mississippi, the Yazoo, Pearl, and Pascagoula rivers are the principal, and lie wholly within this state. The Yazoo, a tributary of the Mississippi, has a general SW. direction, and an entire length of 240 m., 50 m. of which are navigable. The Pearl and Pascagoula rivers have a general S. direction, and both flow into the Gulf of Mexico. Both are navigable, also, to a considerable distance from their mouths.

Mississippi has about 30 m. of sea-coast, but no harbour except Pascagoula. A few low islands lie along the coast, but they are generally sterile, and of little value. The climate nearly resembles that of Louisiana, but it is said to be healthier. But, during summer, fevers and bilious affections are more or less prevalent in all parts of the state. A large proportion of the soil is fertile, and covered with timber; oak, hickory, black walnut, maple, and pine being the principal forest trees.

The sugar-cane grows in the S., and the orange on the lower banks of the Pearl and Pascagoula rivers; in the central region, maize, rice, tobacco, indigo, figs, grapes, melons, and sweet potatoes, attain to excellence; while apples and pears thrive in the N. Tobacco and indigo were formerly the staples of Mississippi. Till the insurrection of 1861, in which the state joined the Confederate States of America, cotton was the principal product, and its culture engrossed by far the greater portion of the attention of the planter. Most estates raise enough of Indian corn for their own consumption, and breed hogs sufficient to supply them with bacon. The trade of the state centres in Natchez.

Jackson, on Pearl River, is the seat of government; but its pop. is small, and it has no recommendation other than its central situation. Natchez is by far the most important town in the state. The legislative power is vested in a senate of 32 members, chosen for four years, and a House of Representatives, elected for two years, by the white male citizens, 21 years of age, who have resided a year in the state. The governor is elected for two years, and the general assembly meets also biennially at Jackson. Justice is administered in a high court of errors and appeals, a superior court of chancery, 11 district courts, and circuit courts in each co., which last have original jurisdiction in civil causes above 50 dolls. Imprisonment for debt has been abolished, and the Penitentary system adopted. There are colleges at Washington, Oakland, and Clinton; though only the first, established in 1802, and called Jefferson College, seems to have made much progress: it has usually about 100 students. In Natchez, Woodville, and Monticello are flourishing public schools; but no general system of primary education was in force till 1846.

This territory was first settled by the French about 1716, and originally formed part of Louisiana. It was ceded to Great Britain in 1763. It was united in a territorial government with Alabama in 1801; and, in 1817, was admitted as a separate state into the Union.

Digitized by Google

Mississippi (from an Indian word meaning 'Father of waters'), a great river of the United States of N. America; forming, with its various tributaries, one of the most extensive water systems in the world, and draining above one-seventh part of the N. American continent. It extends N. and S. between the 29th and 48th parallels of N. lat.; and from the sources of the Alleghany, eastward, to those of the Missouri, westward, is a distance of 1,830 m. measured in a straight line between the 77th and 111th meridians of W. long. Length, from Lake Itasca, the source of the Mississippi Proper, 3,200 m.; but, from the sources of the Missouri, the true head of this mighty river, 4,400 miles. Estimated area of the country drained by it and its tributaries, about 1,100,000 square miles. The Mississippi divides the territory of the Sioux Indians with the states of Missouri and Arkansas, lying on its W., from the Huron territory and the states of Illinois, Kentucky, Tennessee, and Mississippi, on its E. side; but the entire basin receives the drainage, not only of these districts, but also of Ohio and Indiana, with parts of Pennsylvania and Alabama, besides that of an immense extent of hitherto unsettled country in the 'Far West.' The lake Itasca, in which the river rises, and which was first discovered by Schoolcraft in 1833, at a level of 1,330 ft. above the sea, is a beautiful sheet of water, about 8 m. in extent, lying among pine-covered hills of diluvial formation, based on primitive strata. The river flows thence NNE., about 180 m., to Lake Cass, where it takes a SSE. course, and pursues it, with some deviations, to the junction of the Ohio. (Geog. Journal, iv. 242–251.) Its velocity during its passage through the lake-region, bordering on British America, is in many parts very considerable. There are several falls the largest being the Big Falls, at a spot where the stream divides, and forms several islands: about 60 m. lower down, also, are the Falls of St. Anthony, 9 m. above the confluence of St. Peter's River; and here the stream, flowing in two channels, each between 200 and 300 yds. broad, is precipitated over a limestone rock, 16 ft. in perpendicular height. At this point ends the upper course of the Mississippi, though rapids occur for several miles farther down, and even as low as the junction of the *Rivière des Moines*, in lat. 40° 20′ N. It is here about a mile broad, with transparent light blue, though not very deep, water; numerous islands stud its surface; and the current averages 2 m. an hour. Its banks are in many places bounded by broken and precipitous bluffs, ranging from 150 to 750 ft. in height, intersected here and there by deep ravines, and covered with forests of pine, birch, maple, and cedar; but in some parts are rather extensive prairies, covered with the *Zizania aquatica*, a species of the cerealia, commonly, though incorrectly, called wild rice, which forms a considerable article of food among the native Indians. Its principal affluents here are the St. Peter's, St. Croix, Chippeway, Wisconsin, Rock, riv. des Moines and Illinois; the last being by far the most important, and admitting of boat navigation as far as the rapids, 250 m. above its mouth. The waters of the Missouri join those of the Mississippi in lat. 38° 56′ N., and long. 90° W., from which point the latter entirely changes its character. It is here about 1½ m. broad, and the Missouri enters from the W., nearly at right angles, not being more than ¼ the breadth of that into which it empties itself. 'At this point,' says Capt. Hall, such is the impetuosity of the Missouri, that it fairly divides the Mississippi, even to the left, or E., bank; nor were there above 10 or 12 yds. of clear water on that side of the river, while all the rest was muddy. The line of actual contact was particularly interesting: it seemed as if the dirty Missouri had insinuated itself under the clear Mississippi, for we saw it boiling up at a hundred places. First, a small curdling white spot, no bigger than a man's hand, appeared near the surface, which rapidly swelled and boiled about, till, in a few seconds, it became as large as a steamboat, spreading itself on all sides in gigantic eddies and whirlpools, in a manner astonishingly grand and striking. At other places, the two currents ran along, side by side, without the least intermixture, like oil and water; but this separation was never of long continuance, and the contaminating Missouri soon conquered the beautiful Mississippi: indeed, the stain is never for one moment got rid of during the 1,200 m. that the stream runs over, before it falls into the Gulf of Mexico.'

The addition of the Missouri waters, however, has not the effect, that might naturally be expected, of widening the surface of the main stream; for the united waters have only, from their confluence to the mouth of the Ohio, a medial width of about ¾ m. The junction of the Ohio seems also to produce no increase, but rather a decrease, of surface; and the river, in its natural state, is still narrower at New Orleans, which is only 120 m. from its mouth. (Lyell's Geology, i. 268.) Its depth, however, is so much increased, that, at the shallowest places, there are usually 6 ft. water when the river is lowest. The rapidity of the current is more than doubled; and it presents, except in the dry season, a turbid and dangerous mass of waters, passing between jagged and continually falling shores, and leaving, wherever its waters have receded, large deposits of mud. Accidental circumstances often shift the current on to the islands or bends of the river, and every season makes great revolutions in the course of the channel. Sometimes entire bends are broken through by the impetuosity of the waters; sometimes large islands are entirely melted away; at other places, they have been united to the main shore by myriads of logs, that have floated down, and become cemented together by mud and rubbish. Thus, by continually shifting its course, the river sweeps away, during a great portion of the year, considerable tracts of alluvium, which were gradually accumulated by the overflow of former years; and the matter now left during the spring floods will be, at some future time, removed.

About 190 m. below the confluence of the Missouri, the Mississippi receives the Ohio, or *La Belle Rivière* of the French, flowing, with its light green stream, from the E. bank, bringing with it also the waters of its great tributaries, the Wabash, Cumberland, and Tennessee. At this point, not only does the stream turn SW., but the bluffs on both sides retire, and a fine, well-timbered plain extends on both sides the river, ranging (except at the Iron-banks and Chickasaw Bluffs, on the E. banks) from 30 to 50 m. in breadth; still expanding as it approaches the mouth, where it is probably three or four times that width. About 380 m. below the influx of the Ohio is the junction of the Arkansas and White River, which enter the main stream close to each other, on the W. bank. Thence to the confluence of the Red River, is a distance, S. by W., of 360 m., measured along the stream, and, below this latter point, the river bends SE., and enters the Gulf of Mexico, after a course of 335 m. from the Red River, of 1,075 m. from the confluence of the Ohio, and of 1,270 m. from that of the Missouri. The lower part of the Mississippi is so much flooded after the rainy season, that there is often a space of inundated woodland from 30 to 100 m. in width; large swamps, also, are found,

Digitized by Google

during the whole year, on both sides the river; and indeed the whole country nearly as far up as Natchez, 427 m. from its mouth, presents nothing but a swampy tract, the abode of alligators, and subject to epidemic and other diseases most calculated to shorten and destroy human life. The lower part of the Mississippi, for 30 m. above the mouth, as far as the head called Plaquemines, is a reedy marsh, without trees, and containing only a few fishermen's huts and a residence for pilots at Balize: in fact, nothing can well be conceived more dreary than the aspect of the river, even as far as 70 m. above the mouth. The principal entrances for vessels are the NE. pass, lat. 29° 7′ 25′, about 3½ m. SE. of the light-house on Frank's Island; the SE., or main pass, lat. 29° 8′, 4½ m. SSE. from the light; and the SW. pass, about 22 m. SW. of that landmark. On all these passes there are bars at the outlets, with comparatively shallow water: the main pass has about 13 ft., the SW. pass 12 ft.; but the rest are much shallower. The tide rises only from 1½ to 2 ft. at Balize, and is not perceptible more than 30 m. above the mouth. (Blunt's Amer. Coast Pilot, p. 270.) The Mississippi has four other outlets; one, called the Iberville, on the E. bank, flowing through the lakes Maurepas and Pontchartrain; the others being on the W. bank, viz. La Fourche, which leaves the main stream 186 m. from its mouth; Plaquemines, about 31 m. higher up; and the Atchafalaya, which deflects south-westward, in lat. 31° N., and long. 91° 42′ 30″ W. The last-mentioned branch partly empties itself into the bay of its own name, but also returns a portion of its waters into the main current, with which, indeed, all the minor branches of the delta are more or less interlaced. A great raft, or accumulation of drift-timber, in the Atchafalaya, varying in length from 8 to 12 m., and about 220 yds. wide by 8 ft. in depth, is covered with vegetation; and, as it rises and falls with the river, is, in fact, a floating island. Occasionally breaches occur in it, and immense masses separate, but they soon lodge again, in consequence of the pressure and entanglement of the trees. The prodigious quantity of timber annually drifted down the Mississippi and its tributaries is so great as to be a subject of geological interest; not merely as showing how vegetable matter becomes imbedded in submarine and fluviatile deposits, but likewise attesting the constant destruction of soil, and transportation of matter to lower levels, by the tendency of rivers to shift their courses. Each of these trees must have required many years, or even centuries, to attain its full size: the soil, therefore, whereon they grew, after remaining long undisturbed, is ultimately torn up and swept away; but still, notwithstanding such constant destruction of land and timber, the region which yields the supply is densely covered with forests, and almost unrivalled in its resources for the support both of animal and vegetable life. (Lyell's Geology, i. 271–273.)

Tributaries.—By far the largest of all the tributaries of the Mississippi is the Missouri (or 'mud river'), which, indeed, brings down more water than the main stream itself; and, from its prodigious length of course, uncommon turbidness, impetuous and wild character, as well as the singular country through which it runs, possesses a natural grandeur, approaching the sublime. Its sources, discovered by Lewis and Clarke in 1812, are in the Rocky Mountains, and nearly under the same parallel as that of the Mississippi. The river rises in two branches, which collect all the water flowing from the Rocky Mountains, between 42° and 48° N. lat. The most northerly of these sources, called the Missouri, rises in about lat. 45° N., and long. 110° 30′ W., taking an easterly course, inclining to the N. for about 620 m., receiving in its course many considerable affluents, and having a stupendous fall of 170 ft., about 300 m. from its source: the other branch, called the Yellow-stone River, rises by several heads between lat. 42° and 44° N.; and, after a NNE. course of more than 900 m., joins the Missouri in lat. 48° 10′, and long. 104° W.; where its stream is 860 yards wide, or nearly treble the breadth of the Thames at London Bridge. The united river flows hence through a fine open prairie; and, after reaching its utmost N. bend, in lat. 48° 30′, curves southward past Fort Mandan, maintaining the same course to the confluence of the White River, in lat. 43° N., below which it takes a general SSE. course, by Council Bluff, to the junction of the Kanzas, and then runs nearly E. to its union with the Mississippi; its entire length, from the source of the Yellow-stone to this point, being 3,130 m. Its largest tributaries are the Platte (1,800 m.), Kanzas (1,200 m.), and Osage (680 m.), all rising on the E. offsets of the Rocky Mountains, and joining the Missouri on its W. bank: the E. affluents, except the Grand River and Chariton, are quite inconsiderable. The navigation of the Missouri, from the Mississippi to the falls, a distance of 2,575 m., may be generally deemed good, though the season be short, and the steamers run only during daylight. The main difficulties of navigation, arise from its falling banks, the timber imbedded in the mud of its channel, its sand-bars and rapids, and the rapidity of its current, which ranges from 5 to 8 m. an hour. All these may be overcome by using the necessary precautions; but the falls entirely interrupt the navigation, and a portage becomes necessary at the point where, for about 2¾ m., the Missouri rushes down a succession of tremendous cataracts and rapids.

Above the falls, the current is frequently interrupted by shoals and rapids; and, as the river issues from the Rocky Mountains, its banks are shut in on both sides for more than 5 m. by rocks rising perpendicularly from the water's edge to the height of nearly 1,200 ft., and forming a sublime and extraordinary spectacle. This stupendous range of rocks was denominated by Lewis and Clarke, 'the Gates of the Rocky Mountains.'

In the lower parts of the river well-wooded valleys occur, varying from 4 to 6 m. in breadth, and, as far up as 400 m. from its union with the Mississippi, the country is partially settled; but above the Platte open prairies develope themselves, stretching indefinitely on either side in naked grass plains, forming the home of buffaloes, elks, white bears, antelopes, and mountain sheep; regions that are traversed only by the Red Indian, the huntsman, and the trapper.

The Ohio, though of far less magnitude than the Missouri, is certainly more beautiful, and more important in a practical sense. It is formed by the junction, at Pittsburg, of the Alleghany and Monongahela (the former rising 12 m. E. of Coudersport in Pennsylvania, while the latter has its source about 40 m. SSE. of Clarksburg, in Virginia). Its level at this point is stated to be about 830 ft. above the Atlantic, its breadth somewhat exceeds 600 yards; and it immediately assumes that broad, placid, and beautiful aspect which it maintains, except at the rapids of Louisville, all the way to its confluence with the Mississippi. Its valleys are of great depth and fertility, generally high, dry, and healthy; and the country on both sides presents a variety of scenery not elsewhere to be found in the Mississippi valley. It varies in breadth from 400 to 1,400 yards. At Cincinnati it is nearly 600 yards, which may be regarded as its mean breadth. At Louisville, at the rapids,

Digitized by Google

the descent of the river, in 2 m., is 22½ ft.; but the current is not so broken but that boats have, in many instances, ascended the falls. A canal, however, 2 m. in length and 200 ft. wide, with a depth sufficient for large steam-boats, was completed in 1831, by which the rapids are avoided. The rise of the Ohio, during the floods, which occur between March and July, varies from 45 to 60 ft.; but in the dry season it may be forded, in several places, near Louisville. Its higher parts are annually frozen over, and the navigation is usually suspended eight or ten weeks, during winter, by floating ice. Its current, when at mean height, is estimated at 3 m., and, when very low, at 2 m. an hour. It has many islands; but there are none between the states of Ohio and Kentucky. The principal towns on the Ohio, below Pittsburg, are Wheeling, Gallipolis, Cincinnati, Louisville, and Jeffersonville. The length of the Ohio, from Pittsburg to the Mississippi, including its windings, is about 950 m. It enters that river nearly in a SE. direction. 'In ordinary seasons, and under ordinary circumstances,' says Mr. Stuart, 'these rivers are nearly 2 m. wide, and with a volume of water pretty much alike at the point of junction. When floods take place, and the Ohio is the highest, it was no easy matter, before the introduction of steamers, to accomplish its ascent at the confluence; but when the Mississippi is the highest, the Ohio is often, as it were, dammed up for several miles. On the one side, you perceive the Mississippi, presenting a vast agitated and turbid body of water, and on the other hand the Ohio, comparatively clear and calm, descending from the N. The point where their streams unite, though rising 20 ft. above them when at an average height, is not visible in great inundations, when their united waters form a prodigious lake.' (Stuart's America, ii. 283.)

The Ohio separates Virginia and Kentucky, on the S., from Ohio, Indiana, and Illinois, on the N. Its N. affluents are, the Big Beaver, Muskingum, Scioto, and Wabash, the last of which is navigable for 400 m. from its mouth: the S. tributaries are, the Kenhawa, Sandy-river, Green-river, Cumberland, and Tennessee, all rising on the W. side of the Alleghanies, and flowing, by very tortuous courses, through some of the richest districts of the United States. The last two rivers are navigable for steamers, during spring, upwards of 200 m. from their mouths; and the Ohio, with its tributaries, cannot have less than 5,000 m. of navigable waters. It is traversed, in all directions, by an immense number of steamers; and, taking all circumstances into account, few rivers can vie with it, either in utility or beauty.

The Arkansas, which, in point of magnitude, ranks next to the Missouri, joins the Mississippi, on its W. bank, in lat. 34° N. Its length has been estimated at above 2,000 m.; and in summer it pours a broad and deep stream over dry sandy plains, which so absorb the water, that, several hundred miles below the mountains, it may be crossed, in summer, without wading as high as the knees. During the floods, however, it is navigated by steamers, far above the limits of the state which has assumed its name. (See ARKANSAS.)

The Red River and its branch the Washita, join the Mississippi from the W., in lat. 30° 57' N., 30 m. above Baton-rouge. The most remote sources of the former are in the range of mountains called Sierra del Sagramento, skirting the E. bank of the Rio Bravo del Norte, in New Mexico. It runs E., through a mountain-country, for about 800 m., and then turns SSE., which direction it pursues till its junction with the Mississippi; its total length being 1,500 m. It is navigable by steamers for about 300 m.; but the existence of a low, swampy district, clogged with drift-timber, about 60 m. N. of Nachitoches, is an effectual bar to its further navigation, except for small boats. It is believed that the Washita rises in the Masserne mountains of Arkansas, and pursues a general course S. by E., having a length of about 360 m. Both the Red River and Arkansas have their spring-floods, and supply an immense volume of muddy water, to swell the vast lagoon which is formed at the mouth of the Mississippi during its inundation. Their waters, owing to saline impregnations, and the suspension of ochreous earth, are at once brackish and nauseous to the taste; indeed, that of the Red River is so bad at Nachitoches, as to be wholly unfit for culinary purposes. The Yazoo and Big Black River are the only E. tributaries of the Mississippi below the Ohio, and are not of sufficient importance to require a separate notice.

Inundations.—The Mississippi, recipient of all the waters flowing eastward from the Rocky Mountains, and westward from the Alleghanies, is subject to periodical inundations, the effect of which is greatly heightened by the flatness of the country in the lower part of its course. It is intersected, also, in every direction, by numerous natural canals, or *bayous*, which, during the floods, are constantly in motion, and render it impossible to carry on any internal intercourse, except by means of boats. The waters, however, which are thus sent down from the colder regions of the W. and N., and the temperate region of the Ohio valley, are not supplied simultaneously; the southern rivers sending down their floods early in the year, while the northern furnish their supplies as late as midsummer. Hence, the Mississippi appears to have two annual floods; the first, in ordinary seasons, beginning with the new year. Few years pass without a swell about this season. This first flood is uniformly succeeded by a depression, previously to the great spring inundation, which begins in April, commencing with the *first* flood of the Missouri, in March, on the breaking up of the ice: this is followed by that of the Upper Mississippi, and afterwards by those of the Ohio, Illinois, and all the other tributaries. The *great* flood of the Missouri begins in June; about the middle of the same month, the Mississippi attains its greatest height at Natchez, about 400 m. from its mouth; and in the first week of July the flood at New Orleans is generally at its height. Considerable variations, however, occur in the periods, as well as extent, of the inundation.

The swell of the Mississippi during the inundations is, near the sea, only 3 ft.; at New Orleans (120 m. from its mouth), 12 ft.: at Baton-rouge, 138 m. higher, 25 ft.; at Fort Adams, and generally thence to the Ohio, 45 ft.; and in the Upper Mississippi, the rise is from 18 to 22 ft.; the diminution near the mouth being a consequence of the large expanse of the country over which the waters are spread. To secure the land from these inundations, immense embankments, or *levees*, as they are generally called, have been formed along the Mississippi and the canals, or *bayous*, through which its waters overflow. The principal of these embankments commences at the head of the island of Orleans, and extends down the river for about 130 m. The water, however, not unfrequently bursts through this embankment, and submerges the adjoining country.

Depth and Fitness for Navigation.—The Mississippi differs from most of the other great American rivers, in the uniformity of its width and depth for many hundred miles. Indeed, it is navigable, at every period of the year, considerably above the

Digitized by Google

junction of the Missouri, and at least 2,000 m. above its mouth. The width of the main river averages about 900 yards below the Ohio, and its medial depth varies from 90 to 120 ft. (Stuart's America, ii. 247.) The current of the Lower Mississippi, though strong, does not equal that of the Missouri. Its velocity may be ascertained from the progress made by boats in descending the stream. When the water is low a boat will float from 45 to 50 m. a day; when in a middle state, from 60 to 70 m.; and, during the inundation, from 90 to 100 m. This, however, applies only to that part of the river above the Arkansas; for, below this, a small dilatation occurs, and the swamps also receive a vast body of water, by which means the current becomes less rapid. As soon as the river enters the Delta, its rapidity is farther slackened through the diffusion of its waters into various subordinate channels. From this point to New Orleans no variation is perceived; but, between the Arkansas and the Delta, the velocity of the current is diminished nearly a third, and thence to the sea about a half. Outside the bar the current sets eastward; but there are counter-currents, which, in no small degree, perplex the mariner on entering or leaving the river. The white waters of the Mississippi do not readily mix with the sea, and may be distinguished from 9 to 14 m. from Balize.

By far the most dangerous obstruction to the navigation of the Mississippi arises from the multitude of large trees precipitated from its banks into the water. These frequently become firmly fixed in the bed of the river. Some of them are called *planters*, because they are immovable, and constantly expose their pointed shafts above the water. Others are denominated *sawyers*, from their alternately rising above and falling below the surface. It is dangerous for boats to run against either of these; and the best way of avoiding them is to keep in the mid-channel, where they seldom make their appearance; and, for farther security, the steamers have frequently double bows. The number of trees visible to the eye is greater or less, according to the high or low state of the water. But within the last year steam-boats have been fitted up with machinery for removing these obstructions to navigation; and it is believed that, in no very lengthened period, this impediment will no longer exist, at least in any dangerous degree.

Navigation and Trade.—The facilities afforded by the Mississippi and its various tributaries for internal navigation are wholly unequalled, except, perhaps, by the Amazon and its tributaries, in S. America. In so far, indeed, as navigation is concerned, the Mississippi should be regarded, from its great depth and comparative freedom from shoals and cataracts, not so much a river as a vast internal sea, a Mediterranean in fact, extending through all the central and most fertile portion of N. America; and enabling its remotest recesses, though 2,000 or 3,000 m. inland, to maintain a direct communication, by water, with the most distant quarters of the globe. It is but yesterday, as it were, since the valley of the Mississippi began to be occupied by civilised man, and reclaimed from the wilderness; and its astonishing increase in population and wealth is principally ascribable to the facility afforded by this noble river for its intercourse with the other parts of America, and of the world. The trade and navigation of the Mississippi is already, indeed, incomparably greater than that of the Ganges, the Danube, the Elbe, or any other river of the ancient continent. And vast as are the natural capacities of the Mississippi for navigation, they have been, and, no doubt, will continue to be, greatly extended by canals and artificial means. It is already united with the grand chain of lakes and the basin of the St. Lawrence; and goods taken on board at New York may be conveyed to New Orleans without being unshipped, and conversely.

Sailing-boats are totally unable to stem the current of the Mississippi above Natchez, and are obliged to have recourse to oars and long poles; nor is it easy to give any adequate idea of the laborious and tedious operation of propelling them against the stream, from 12 to 16 days being usually consumed in ascending from New Orleans to Natchez (320 m.). The navigation, however, has been prodigiously facilitated by the introduction of steamers, which stem the current at a rate varying from 5 to 6 m. an hour.

The principal drawback on the navigation of the Mississippi consists in the fool-hardiness of the captains of the steamers (nearly all of which are propelled by high-pressure engines), which too often results in explosions and other accidents, that frequently occasion great loss of life and property. The common and only safe rate of these steamers is about 12 m. an hour with the stream, and 6 m. against it. The number of flat-bottomed keel-boats worked by manual labour is rapidly decreasing; and the probability is that steam-navigation will very soon supersede every other medium of communication on the Mississippi, whether for passage or commerce.

MISSOURI, one of the U. States of N. America, and, in point of extent, the second in the Union, in the W. part of which it is situated, between lat. 36° 30′ and 40° 30′ N., and long. 89° and 95° 30′ W.; having N. Iowa, W. unsettled Indian territories, E. the Mississippi river, by which it is separated from Illinois, Kentucky, and Tennessee, and S. Arkansas. Length, N. to S., 280 m.; average breadth, 230 m. Area, 67,380 sq. m. Pop. 1,182,012 in 1860. No part of this state can be called mountainous, though its SW. portion has some elevated land. The country in the SE. is a morass, forming a portion of the great Arkansas swamp; the rest of the surface consists principally of rolling prairies continuous with those of Illinois, Indiana, and Ohio. It is watered by the two largest rivers of the American continent, which, notwithstanding its internal situation, afford it facilities for communicating with the most distant countries: the Mississippi has a course of 550 m. along its E. boundary, and the Missouri intersects the state near its centre, and joins the Mississippi within its limits. There are numerous tributaries of the above rivers, which are navigable to some distance; as the Osage, Gasconade, Grand River, Chariton, and Merrimac. The Osage is navigable for keel boats for above 200 m. On the banks of the rivers, especially the Missouri, the soil is deep, and extremely fertile, and, also, in the alluvial prairies of the N. The hill country is much less productive, a considerable part of it being either barren or covered with pine woods. But in those parts where the soil is the least fertile, mineral products are abundant, and, in fact, these at present constitute the chief wealth of the state. Great quantities of iron ore and coal exist throughout the Missouri valley; and lead, antimony, zinc, manganese, cobalt, arsenic, plumbago, nitre, salt, jasper, and marble, are found elsewhere. The great mineral district of Missouri extends over about 3,000 sq. m. to the SW. of St. Louis. This region is principally celebrated for its lead mines. Potosi may be considered its centre. The ore is the galena or sulphuret of lead, and is found in detached masses, yielding from 60 to 85 per cent. of metal.

Digitized by Google

Copper, tin, gold, and silver are met with in some places, but the precious metals are not in sufficient quantities to pay for their working.

The agricultural staples consist of hemp, flax, tobacco, and corn of various kinds. Common and sweet potatoes, turnips, garden vegetables, and artificial grasses are plentiful. Cotton is cultivated in the S., but not to any great extent. Large herds of cattle, horses, and hogs are reared; and beef, pork, tallow, hides, and live stock constitute, together with lead, furs, buffalo hides and tongues, lumber, and maize, the principal articles of export. The prairies are excellent natural pastures, and the business of rearing cattle is almost reduced to the simple operation of turning them upon these prairies, and letting them fatten until the owners think proper to claim the tribute of their flesh. Some of the prairies appear peculiarly fitted for sheep walks; but sheep are not yet reared in any great numbers. The principal manufacturing establishments are smelting works, forges, shot factories, &c., in the mining district, and flour and sawing mills on the various rivers. A good deal of shot is annually exported from Herculaneum and other towns.

St. Louis, on the Mississippi, is the chief commercial town, and was formerly the cap.; but the seat of government has been removed to Jefferson city on the Missouri, nearly in the centre of the state. The legislature consists of a senate of 33, and a house of representatives of 97 mems., both being elected by the white male citizens 21 years of age, who have resided in the state for a year previously to the election; but the electors of representatives must, also, have resided for 3 months in the co. for which they vote. The senators are elected for 4 years, and the representatives for 2: the general assembly convenes every 2 years. The governor and lieut.-governor are chosen by the people every 4 years, and are not again eligible till after the lapse of a similar period. The state is divided into 4 judicial districts, in each of which the supreme court sits twice a year. There are 11 circuit courts, with civil and criminal jurisdiction, and a superintending control over the county courts. The judges are nominated by the governor, and confirmed by the senate. They hold office for 8 years; but not beyond 65 years of age. 1-16th part of the land of every township is appropriated by Act of Congress for the support of primary schools; and the *saline fund*, derived from the sale of salt springs, and other special funds, have been devoted to purposes of public instruction. St. Louis has a Catholic university, attended by about 160 students; St. Mary's college, in Perry co., is well attended. There are some other colleges, and flourishing private seminaries in the state, and the Missouri university has above 100 students. Missouri sends 9 representatives to the Congress of the U. States.

At the beginning of the 18th century, a brisk traffic in furs and minerals being maintained between the Europeans and Indians, induced the former to settle in this territory. About the middle of that century St. Louis, St. Génévière, and other towns, were founded by the French; but, in 1762, the country was given up to Spain. In 1800 it was restored to the French, who ceded it to the U. States in 1803. Missouri became a state of the Union in 1821.

MISSOURI (RIVER). See MISSISSIPPI.

MISTRETTA (an. *Amastra*, or *Mytistratum*), a town of Italy, island of Sicily, intend. Catania, on a high hill, 5 m. SW. Caronia. Pop. 12,232 in 1862.

MITCHELSTOWN, an inland town of Ireland, prov. Leinster, co. Cork, on an affluent of the Funcheon, 26 m. NNE. Cork. Pop. 2,920 in 1861. The town consists of a well-built square, and 2 principal streets. It has a par. church, and Rom. Cath. chapel, both handsome modern structures; a college, which maintains 12 poor Protestant gentlemen and 18 gentlewomen, endowed by the Kingston family, a small barrack, and market-house. A manor court for pleas of the amount of 2*l.* is held every third Monday, and petty sessions every Wednesday. It is a constabulary station. Markets on Thursdays: fairs on the 10th Jan., 25th March, 23rd May, 30th July, 12th Nov., and 2nd and 6th Dec. Adjoining the town, on the W., is the magnificent seat of the Earl of Kingston, erected in 1823.

MITTAU, a town of European Russia, capital Courland, on the Aa, 25 m. SW. Riga, on the railway from Riga to Dunaburg. Pop. 23,150 in 1858. The town is but indifferently built, the houses being mostly of wood, and the streets, with a few exceptions, unpaved. It has a castle, erected in 1739, which served in 1796 as an asylum for Louis XVIII. of France, and is now the residence of the governor and the official authorities. It has a gymnasium and a good library; a theatre, capable of accommodating 3,000 spectators, a hospital, and a literary society. The nobility and gentry of the prov. assemble here at stated times for the despatch of business connected with the administration of the prov., and many of them reside in town during the winter, when it becomes unusually gay. Its situation is low, sandy, and exposed to inundation.

MOBILE, a city and sea port of the U. States of N. America, State Alabama, cap. co. of its own name at the mouth of the Mobile river in Mobile Bay, 175 m. SSW. Tuscaloosa, and 115 m. NE. by E. New Orleans. Pop. 21,561 in 1860. The town is situated on dry and elevated ground; but, being surrounded by a low swampy tract, it was formerly very unhealthy. But this has been in part obviated by a system of drainage, and Mobile is now tolerably salubrious. Among the public buildings are the court-house, gaol, and churches for Rom. Catholics, Episcopalians, Presbyterians, and Methodists. A Rom. Catholic college was founded in 1830, at Spring Hill, about 6 m. from town. It is supplied with excellent water, conveyed in pipes a distance of 2 m.

Mobile is one of the principal ports in the Union for the shipping of cotton. It is, in fact, the entrepôt for nearly the whole of Alabama, and for parts of Georgia and Mississippi. A light-house, with a fixed light, having the lantern elevated 55 ft. above the sea, has been erected on Mobile Point, at the E. entrance of the bay. There are 15 ft. water over the bar at low ebb; but a shoal within the bay prevents vessels drawing more than 8 or 9 ft. water coming to the town at ebb tide.

MOCHA, the principal port in the Red Sea, frequented by Europeans, in that part of Arabia called Yemen, about 40 m. N. from the Strait of Bab-el-mandeb, lat. 13° 19′ 30″ N., long 43° 20′ E. Pop. variously estim. at from 5,000 to 7,000. It is encircled with walls and indifferently fortified. Its appearance from the sea is imposing, but internally it is poor and mean.

Mocha is situated on the margin of a dry sandy plain. It is built close to the shore, between two points of land, which project and form a bay. Vessels drawing from 10 to 12 ft. water may anchor within this bay at about a mile from the town; but large ships anchor without the bay in the roads, in 5 or 7 fathoms water; the grand mosque bearing ESE., and the fort to the S. of the town S. by E., distant about 2 m. from the shore.

Digitized by Google

The great article of export from Mocha is coffee, which is universally admitted to be of the finest quality. The greater portion is sent to Djidda and Suez; but there is a large export to Bombay and other parts of India, whence some is sent to Europe: occasionally, however, the exports from Mocha and Hodeida, direct for Europe, are very considerable. Besides coffee, the principal articles of export are dates, adjoue, or paste made of dates, myrrh, gum Arabic, olibanum, senna (*Cassia Senna*), sharks' fins, tragacanth, horns and hides of the rhinoceros, balm of Gilead, ivory, gold dust, civet, aloes, and sagapenum. The principal articles of import are rice, piece goods, iron and hardware. The ivory, gold dust, and civet, met with at Mocha, are brought from the opposite coast of Abyssinia.

MODBURY, an old bor., market town, and par. of England, hund. Ermington, co. Devon, 29 m. SSW. Exeter, and 181 m. SSW., London. Pop. of par. 1,612 in 1861. Area of par. 5,910 acres. The town, which is very irregularly laid out, has four principal streets, meeting in a large open market-place. The church is large and well built, having a spire 134 ft. high: the living is a vicarage, in the gift of Eton college, to which Henry VI. gave the estates of an alien priory of Benedictines that formerly stood near the church. The Wesleyan Methodists, Independents, Baptists, and the Society of Friends have places of worship. A Lancastrian school is attended by 70 boys, and about 80 children receive instruction in two infant schools.

Modbury had formerly a considerable share in the manufacture of serge, plush, and felt hats; but these branches of industry have long decayed, and the present inhab. are mostly engaged in agriculture and retail trade. The town, which is a bor., though without an act of incorporation, is governed by a portreeve and other officers; and in the reign of Edward I. it sent 2 mems. to the H. of C.; but it afterwards was divested of this privilege, because of its inability to bear the expense.

MODENA (an. *Mutina*), a city of N. Italy, cap. of prov. of the same name, in a fine plain between the Panaro and the Secchia, 24 m. WNW. Bologna, on the railway from Parma to Bologna. Pop. 58,444 in 1862. Modena has a citadel, and is surrounded with ramparts, which, however, conduce less to its strength than to its beauty. It is regularly laid out, well built, and clean. It has been much improved and embellished within the last fifty or sixty years, and is divided into the new and the old city by the *Strada Maestra*, a part of the Emilian Way, which intersects it from end to end. The general architecture of Modena is striking and agreeable; almost all its streets are bordered with arcades over their footways. The former ducal palace is the finest public building; it stands isolated in the great square, and, unlike the palace of Parma, it has been completed. It had formerly a noble collection of paintings; but some of its *chefs d'œuvre* were purchased by the elector of Saxony, and conveyed to Dresden in 1746, and others were taken away by the French; still, however, it is one of the best collections in Italy. It includes works by Raphael, Carlo Dolci, Andrea del Sarto, Guido, Guercino, the Caracci, and Procaccino, the Crucifixion by Pomarancio, and a copy of the famous *Notte* by Correggio. The ceiling of the gallery is painted in fresco by Francesconi; and in one of the rooms is a recumbent Cleopatra by Canova. The public, formerly ducal, library, known as the *Biblioteca Estense*, is a valuable collection of 60,000 vols. Two of the best scholars, and most laborious, diligent, and able writers of whom Italy has to boast, Muratori and Tiraboschi, were successively librarians during the last century. In the square before the palace is a fine statue of Duke Francis III., the founder of the university. The cathedral is a Gothic edifice of considerable antiquity and imposing appearance, but not in a pure style. It is principally remarkable for a square marble tower, one of the loftiest in Italy, in which is kept the famous bucket, once the cause of a serious feud between Modena and Bologna, and which has been immortalised by Tassoni in the *Secchia rapita*. One of the most celebrated works of Guido, the Presentation in the Temple, formerly adorned the cathedral, but it was carried off by the French, and has not been restored. The churches are numerous; but few deserve notice, except those of St. Vicenzo, St. Agostino, and the Dominican church, with some colossal statues. The city has several hospitals and asylums, a theatre, some public baths, various good scientific collections, and a library of 80,000 vols., comprising many rare editions of the 15th century, and some valuable MSS. It is well supplied with water by numerous subterranean cisterns; and is united to the Panaro by a canal navigable by boats of 30 tons. Weaving and spinning silk were formerly important branches of industry; but these have greatly declined; and manufactures of hemp, woollen cloths, leather, hats, and glass have, to a great extent, taken their place. It has a large weekly market for agricultural produce.

Mutina is supposed to have been founded by the Etruscans. It is said, by Livy, to have been colonised by the Romans, A. U. C. 569 (xxxix. 55.); and it is styled by Cicero, '*firmissimam et splendidissimam populi Romani coloniam.*' (Phil. v. 9.) A few Roman antiquities, mostly tombs, still exist at Modena. It suffered many disasters in the times of Attila, Odoacer, and the Lombard kings; and was afterwards governed successively by its bishop and magistrates, and belonged to the Popes, Venetians, and the dukes of Milan, Mantua, and Ferrara, before it became the property of the house of Este. Under the French it was the cap. of the dép. Panaro. The learned antiquary Sigonius, the poets Molsa and Tassoni, and the celebrated anatomist Fallopius, were natives of Modena.

MODICA (an. *Motyca*), a town of Italy, island of Sicily, intend. Syracuse, cap. district of its own name, on the Scicli, 31 m. WSW. Syracuse. Pop. 30,875 in 1862. The town is situated among craggy rocks, and generally ill built. Among the public buildings are a castle, numerous churches and convents, a ducal residence, a town-hall, 2 hospitals, several public schools, and a government loan-bank. The Franciscan convent is said to possess some fine mosaics. In the adjacent valley of Ipsica are numerous troglodytic caves. In 1833, a good many houses and upwards of 100 persons were buried by the fall of a mountain near Modica.

The district of which this town is the cap., has an area of nearly 120,000 acres, with several towns, and a pop. of about 80,000. It was endowed with peculiar privileges by Roger, king of Sicily, the principal being that its courts of justice should be independent of those of Sicily.

MOFFAT, a village of Scotland, celebrated for its mineral springs, co. Dumfries, delightfully situated on the Annan, at the head of an extensive valley, and bounded, almost immediately on the N., by an amphitheatre of hills, the highest in the S. of Scotland, 45 m. S. Edinburgh, and 20 m. N. by E. Dumfries, near the Caledonian railway. Pop. 1,462 in 1861. The town is extremely neat, clean,

Digitized by Google

and well-built, consisting principally of a wide street along the line of road from Dumfries to Edinburgh. Latterly, however, or since the opening of the Caledonian railway, which has a station at Beatock Bridge, within 2½ m. of the village, it has been much enlarged; a great number of new houses having been built, partly for the accommodation of fixed residents, and partly of visitors to the wells. In fineness of situation and purity of air, it is superior to most watering-places in the kingdom: it has a par. church, a free church, a dissenting chapel, and some very good inns. The mineral springs, which are sulphureous and chalybeate, rise at no great distance from the town, on the slope of the adjacent hills. One of these springs was discovered in 1633, the other in 1748.

MOGADORE, or MOGODOR, called by the Moors *Shwera*, a sea-port town, and the principal emporium of Morocco, on the Atlantic, about 105 m. W. Morocco; lat. 31° 50′ N., long. 9° 20′ W. Pop. estim. at 10,000. It stands on a patch of granular sandstone rock, which, at high water, is nearly insulated by the sea. The country around is low, flat, and unproductive; so that vegetables have to be brought from gardens from 4 m. to 12 m. inland, and cattle and poultry from a still greater distance. Water is also scarce, and rather dear; being either rain water collected and preserved in cisterns, or brought from a river about 2 m. distant. The white stone buildings give the town an imposing appearance from the sea. It is divided into 2 contiguous portions, both surrounded by walls: that called the citadel, comprises nearly half the entire town, with the royal palace, the houses of most of the governors and chief officers, the custom-house, the foreign consulates, and a street of well-built shops of red sandstone, formerly occupied by European traders. The houses in this part are well-built and lofty, and the streets cleaner than in most other towns in the Moorish dominions. The citadel is shut off from the rest of the town by a high wall, with a strong gate, which is closed at 9 o'clock every night. The other portion of Mogadore is not so well laid out, nor so clean, the Jews' quarter, in particular, being excessively filthy: it has, however, a very extensive mosque, with a high square tower, and other public buildings. It is entered by 3 principal gates; which, with many in the interior, are closed at sunset. To the S. of the citadel is what is called the port, being an inner roadstead, protected by a rocky island, about 1½ m. in length, 3 m. from the shore. It has not more than 10 ft. or 12 ft. water at ebb tide, and 23 ft. when deepest; it is therefore fit only for small vessels, large ships anchoring outside the harbour, the long battery bearing E., distant 1½ m. The island bounding the harbour is appropriated exclusively to a state prison, and is defended by a few pieces of ordnance, ensconced behind mud-wall embrasures. The landing-place is a long stone slip, near the arsenal, protected on the W. by a long battery, mounting several brass cannon, and containing a large tank, and a number of prison cells. The arsenal, with which this battery communicates, is a really handsome structure, consisting of a large range of bomb-proof casemates, flanked at either end by an elegant square tower, with turrets at their angles, connected by a battery of 2 tiers, having in its centre a lofty arched gateway. The long battery defending the whole town on the W. is an extensive line-wall along the shore, crowned with brass ordnance, and having beneath a range of bomb-proof casemates capable of containing 4,000 or 5,000 men. On the land side, Mogadore is protected from the attacks of the Arabs by a round tower, furnished with brass cannon. All the fortifications were erected under the superintendence of a European engineer in the last century.

The trade of Mogadore was formerly very extensive; her port was open to the ships of the different European countries, most of whom had consuls here. Most part of the commerce between Europe and Morocco is still carried on through Mogadore; but England and Sardinia are the only states that retain consuls. The principal imports are English woollen and cotton stuffs and hardware, German linens, tin, copper, earthenware, mirrors, glass, sugar, pepper, and paper. The exports principally consist of sweet and bitter almonds, gum Arabic, and other gums, bees' wax, cow and calf skins, ivory, ostrich feathers, gold dust, olive oil, and dates. Accounts are kept in *nutkeels* of 10 ounces, the ounce being divided into 4 *blankeels*, of 24 fluce each. The blankeel may be valued at 1*d.*, the ounce at 4*d.*, and the nutkeel, or ducat, at 3*s.* 4*d.* The corn measures are, for the most part, similar to those of Spain. The quintal = 119 lbs. avoird. The market lb., for provisions = about 1¾ lb. avoird. The canna, or cubit = 21 English inches, is the principal long measure. Mogadore has no peculiar manufacture, but a good deal of the excellent woollen cloth of the country is sold in its markets.

MOGHILEF (Pol. *Mohylof*), a town of Russian Poland, gov. Podolia, cap. circ. on the Dniestr, 58 m. ESE. Kaminietz, and 180 m. SW. Kief. Pop. 9,200 in 1858. From its situation, sheltered on every side by mountains, its climate is milder than that of the rest of Podolia; its fruits are excellent, and the silk worm thrives well. It has several Greek, Rom. Cath., and Armenian churches, and a Greek convent; and is the residence of an Armenian bishop. It has a brisk trade with Wallachia, and the adjacent provs., in raw produce, and some well-attended fairs.

MOHACZ, a mean but large village of Lower Hungary, on the Danube, co. Barany, 25 m. E. by S. Funfkirchen. Pop. 10,931 in 1857. Near this village, on the 29th of August, 1526, the Turks, under Solyman the Magnificent, obtained a great victory over the Hungarians. Louis, king of Hungary, 2 archbishops and 6 bishops, many nobles, and about 22,000 private soldiers, are said to have been killed in the battle and the pursuit. In 1687, the Turks were themselves defeated in the vicinity of this village by the Imperialists, under the Duke of Lorraine.

MOHILEF, or MOGHILEV (Pol. *Mohilow*), a gov. of European Russia, formerly included in the gov. of Vitepsk, between the 52nd and 55th degs. of N. lat., and the 29th and 33rd of E. long.: having N. Vitepsk, E. Smolensk, S. Tchernigov, and W. Minsk. Length, N. to S. 210 m.; average breadth nearly 85 m. Area, 17,470 sq. m. Pop. 884,640 in 1858. The only physical difference between it and the gov. Vitepsk is, that it belongs to the basin of the Dniepr, while the latter gov. belongs to that of the Dwina. In the N. of the government is a low chain of hills, separating the two river basins; but the rest of the surface is an extended plain, partly covered with forests and in many parts marshy. The course of the rivers is mostly S.; the principal, next to the Dniepr, are its tributaries, the Soja and Drouetz. Small lakes are numerous. The climate is milder and drier than that of Vitepsk. The soil is generally fertile; and though agriculture be extremely backward, nearly four million *chetwerts* of corn are annually grown, a quantity considerably exceeding the home demand. Rye, barley, oats, hemp, and flax are the principal products; and, in the gardens, hops and pulse. The breeds of cattle

Digitized by Google

and horses are very inferior; but latterly the sheep have been improved, by crossing with the breed of Saxony. Goats and hogs are numerous. This is one of the most richly wooded of the Russian governments; and its forests, the produce of which are floated down the rivers to the Black Sea, furnish the building-yards of Nicolaeff, Odessa, and Sevastopol, with timbers and masts for the largest ships. Only a small proportion of the forest lands belongs to the crown. Bog iron is plentiful, but it is dug only by the poorest classes. In respect of manufactures, Mohilef is behind almost all the other governments of the empire. Except a few tanneries, all the manufactures are in the hands of the Jews; but, with the exception of some distilleries, and soap and potash works, they are quite unimportant. It is divided into 12 districts; Mohilef, the cap., and Mstislavl are the principal towns. The inhabs. are mostly Russians and Jews, with some Poles, Lithuanians, Moldavians, and Wallacks: their religion is partly that of the Greek and partly of the Roman church, each of which has an archbishop in the gov.

MOHILEF, a town of European Russia, cap. of the above gov., on the Dniepr, 85 m. SW. Smolensk, and 110 m. E. by S. Minsk, on the railway from Dunaburg to Orel. Pop. 24,562 in 1858. Mohilef has a better appearance than most Russian towns, many of its houses being of stone or other solid material. It is divided into four quarters, one of which consists of the *kreml* or castle, built on an eminence, and two of the other quarters are surrounded by ramparts. In the centre of the town is a large octagonal area, with neat stone buildings, including the residence of the Greek archbishop. It has at least 20 churches, three-fourths of which are Greek; there are also several convents, a Lutheran church, and two synagogues. The government offices and magazines are handsome edifices. Mohilef is the head quarters of the Russian 'army of the west,' and the seat of Greek and R. Catholic archbishops, the latter having authority over all the R. Catholics of Poland and Russia. It has two episcopal seminaries, a gymnasium, a town-school, and various charitable institutions. The business of tanning is extensively carried on; it has an extensive trade with Riga, Königsberg, Dantzic, and Odessa, to which it sends leather, hides, lard, wax, honey, especially the latter, potash, hemp, flax, oil, corn, and other raw products; receiving, in return, among other foreign goods, a good deal of thrown silk. The fairs of Mohilef are well frequented. The epoch of its foundation is unknown. After several times changing masters, it was finally annexed to Russia in 1772.

MOISSAC, a town of France, dép. Tarn et Garonne, cap. arrond., on the navigable river Tarn, crossed here by a handsome stone bridge, 14 m. WNW. Montauban, and 97 m. SE. Bordeaux, on the railway from Bordeaux to Toulouse. Pop. 10,445 in 1861. The town is tolerably well built, and has an elegant fountain in its principal square. The most remarkable feature of the place, however, is a ruined abbey founded in the 11th century, formerly possessing great wealth and importance; the buildings are of great extent, but are for the most part either in ruins, or converted into private dwellings. The church-porch is of high antiquity, and has some curious sculptures; the cloisters also are highly interesting, but the church itself is more modern, and of a heavy style. A good deal of corn is ground here for the use of the colonies, and the town has a considerable trade in wheat, oil, saffron, and wine.

Moissac, founded in the 5th century, appears from its walls to have been formerly much larger than at present. It suffered severely from the religious wars.

MOLA DI BARI, a sea-port town of Southern Italy, prov. Bari, on the Adriatic, 13 m. SW. Bari. Pop. 11,884 in 1862. The town consists of an old and a new division; the former, which has a castle and is surrounded by a wall and ditch, has narrow, crooked, and gloomy streets, and poor houses. The other, or more modern division, is comparatively well built along the seaside, and has three creeks, where the small vessels which frequent the port load oil, cotton, and carobs. The traces of an unfinished mole show that this was formerly a place of some commercial importance. The port, between this mole and a rocky reef to the N., is insecure; but there is an open roadsted on either side the town, where vessels may anchor in ten fathoms water with a sandy bottom.

MOLD, a market town, par. and parl. bor., contrib. to Flint, hund. of its own name, co. Flint, 10 m. W. by S. Chester, and 171 m. NW. London, on the London and North Western railway. Pop. 3,735 in 1861. The town, situated in a valley, close to the Alyn, and surrounded by lofty hills, is small and irregularly built; but there is a very handsome town-hall, and, in the environs, are numerous handsome seats and elegant mansions. The church, a large structure of the 16th century, has a highly ornamented embattled tower, and contains some curious monuments. The Wesleyan Methodists, Calvinists, and Baptists have, likewise, their respective places of worship, with attached Sunday schools. Within the par. there are extensive coal-pits, lead and iron mines. Mold was constituted, by the Reform Act, a parl. bor., contrib. (with six others) to Flint. Registered electors in district, 727 in 1865. The co. assizes are held here. Markets on Wednesday and Saturday. Fairs, Feb. 13, March 21, May 12, Aug. 2, and Nov. 22.

About 1 m. W. from the town is a noted spot called Maes-Garmon, the scene of a victory gained in the 5th century, by the Welsh over the Picts and Saxons: a pillar, with an inscription, commemorates the event. About 1½ m. also, on the Chester road, are some remains of Offa's Dike, the ancient boundary between Wales and England.

MOLDAVIA. See WALLACHIA and MOLDAVIA.

MOLDAU, a river of Bohemia, and, next to the Elbe, the principal in that kingdom, through the S. and central parts of which it flows. It rises in the Bohemian forest, about lat. 49° N. and long. 13° 35′ E.; runs at first SE. to Rosenberg, and thence generally N. to its junction with the Elbe at Melnik, in about lat. 50° 20′, long. 14° 30′, after a course estimated at somewhat more than 200 m. It is properly the head stream of the Elbe, being continuous with the latter in a direct line, and carrying more water to it than the river called the Upper Elbe. It receives the Woltawa, Luschnitz, Sazawa, and Berau: Rosenberg, Budweis, and Prague are on its banks. The Danube and Elbe have been united by a railway 75 m. in length, completed as early as 1829, from Linz, in Upper Austria, to Budweis, where the Moldau becomes navigable for boats of from 10 to 15 tons.

MOLFETTA (an. *Respa*), a sea-port town of S. Italy, prov. Bari, cap. canton, on the Adriatic, 16 m. WNW. Bari, on the railway to Foggia. Pop. 25,884 in 1862. Its appearance from the sea is imposing; and though its streets are narrow and dirty, it has many good houses of stone almost equal in beauty to white marble. It has a cathedral, several other churches, and a college, and is

Digitized by Google

the see of a bishop. Its port, formed by a mole, is sheltered from all winds except the N. Opposite to it is a sandbank, which serves as a natural breakwater, the entrances to the harbour being at either extremity of the bank. It has some linen fabrics, a saltpetre manufacture, and some slips for ship-building; and has a considerable trade in the shipping of corn, oil, and almonds.

MOLTON (SOUTH), a mun. bor., market town, and par. of England, hund. of its own name, co. Devon, on the Mole, 24 m. NNW. Exeter, and 164 m. N. by S. London, on the Taw Vale railway. Pop. of bor. and of par. 3,830 in 1861. Area of par., 6,160 acres. The town, occupying an eminence W. of the river, at the union of several high roads, comprises a large market-place and several well paved and lighted streets, the whole having a peculiarly clean and neat appearance. The guildhall is a handsome and commodious building, near which is a small gaol. The church, adjacent to the market-place, is built in the perpendicular style: the living is a perpetual curacy in the gift of the dean and canons of Windsor. The Independents and Wesleyans have also their respective places of worship, and there are three Sunday schools, attended by about 600 children of both sexes. A grammar-school, founded in 1614, is respectably conducted, and there are two other schools supported by endowments and subscriptions. S. Molton has manufactures of lace, serges, shalloons, and felts. The bor. is governed (according to the Mun. Reform Act) by a mayor, three other aldermen, and twelve councillors. It is one of the polling places at elections for the N. division of the co. Quarterly and petty sessions are held here, and a court of record sits once in three weeks. Markets on Tuesday, Thursday, and Saturday; that on Saturday being one of the largest in N. Devon. Great markets (not chartered as fairs), Saturday after Feb. 13, and April 27, Wednesday before June 22, and after Aug. 26, Saturday before Oct. 10, and Dec. 12, chiefly for cattle.

MOMPOX, or MONPOX, a city of S. America, repub. New Granada, and, next to its cap., the most important in the prov. Cartagena; on the Magdalena, about 25 m. above the confluence of the Cauca; lat. 9° 14′ 20″ N., long. 74° 27′ 30″ W. Pop. estimated at 10,000, or, with the neighbouring villages, 15,000. The town is above a mile in length; the streets are of a good breadth, crossing each other at right angles. It has a custom-house and a fine quay, built very high, on account of the floods which take place in Dec. Several gunboats are stationed here, for the protection of the navigation. Mompox is a place of some commerce. The chief exports are corn, hides, and Brazil wood. Pamplona and Cuença transmit some tobacco, sugar, and chocolate to this *entrepôt*; Antioquia sends gold, and Bogota the produce of the Upper Magdalena. Mompox is surrounded by swamps, and liable to inundations; and alligators come up to the very banks of the river to feed on the offal thrown from the city.

MONACO, a city and principality of N. Italy. The principality, which is under the protection of the king of Italy, comprises at present only the city of Monaco, the rest of the territory, embracing the towns and districts of Mentone and Roquebrune, of a total area of 52 sq. m., with nearly 10,000 souls, having been, in 1861, purchased by Napoleon III. from the reigning prince of Monaco, for the sum of 4,000,000 fr., or 160,000*l.*, being at the rate of sixteen pounds sterling per soul.

The city of Monaco (an. *Portus* or *Arx Herculis Monaci*) is built on an elevated promontory stretching into the sea, about 9 m. ENE. Nice. Pop. 1,020 in 1861. It is walled and defended by a fort; and has some appearance of strength, but is entirely commanded by an adjacent hill.

The principality of Monaco was founded in the 10th century, and has remained ever since in the Grimaldi family. The reigning prince is a peer of France, with the title of Duc de Valentinois, and usually resides in Paris.

MONAGHAN, an inland co. of Ireland, prov. Ulster, having N. Tyrone, E. Armagh, S. Louth and Meath, and W. Cavan and Fermanagh; area, 318,733 acres, of which 9,236 are unimproved mountain and bog, and 7,844 water. Surface hilly, but the hills are mostly arable; soil moderately fertile. There are some large, and a great many small, estates. The land is very much subdivided; so much so, that it is said by Mr. Wakefield that the larger class of farms do not average 25, nor the smallest 6 acres. *Conacre* is very general here, and agriculture is in the most depressed state. Principal crops, oats, potatoes, and flax, the latter being very extensively cultivated. Large quantities of wheat are also grown, and its culture is extending. Considerable improvements have latterly been effected in the breed of cattle; and a good deal of butter is made, though there are no large dairies. Goats are very generally kept by the cottiers for the sake of their milk. Much of the field work is done by the spade. The linen manufacture was at one time very widely diffused over the co., most of the small farmers having looms; but this combination of employments, which has been injurious alike to agriculture and manufactures, is now, owing to the greater cheapness of machine-made yarn and fabrics, greatly diminished. The co. has vast beds of limestone and lead ore, and indications of coal have been discovered. There are no rivers of any importance. Monaghan has 5 baronies, and 19 parishes; and sends 2 mems. to the H. of C., both for the co. Registered electors, 5,350 in 1865. Principal towns, Monaghan, Clones, Carrickmacross, and Ballybay. At the census of 1861, the co. had 25,057 inhab. houses, 25,590 families, and 126,482 inhabitants, while in 1841 this co. had 35,078 inhab. houses, 36,934 families, and 200,442 inhabs.

MONAGHAN, an inland town of Ireland, prov. Ulster, co. Monaghan, of which it is the cap., on the main road from Dublin to Londonderry, and on the railway from Armagh to Longford. Pop. 3,797 in 1861. The town consists of a central square, called the Diamond, with several diverging streets. Its public buildings are the par. church, Rom. Catholic chapel, three Presbyterian, and two Methodist meeting-houses; the co. gaol on the radiating plan, court-house, diocesan school for the sees of Raphoe, Kilmore, and Clogher, a national school, a cavalry barrack, a market-house, and the co. infirmary. The corporation, consisting of a provost, 12 burgesses, and commonalty, sent 2 mems. to the Irish H. of C. down to the Union, when it was disfranchised. The assizes for the co. are held here, with general sessions 4 times a year, and petty sessions on Thursdays. It is a constabulary station. It has a considerable linen trade, a large brewery, and is a great mart for agricultural produce. Markets on Mondays, Tuesdays, Wednesdays, and Saturdays; fairs on the 1st Monday in every month. The Ulster canal passes near the town.

MONASTIR, or BITOLIA, a town of European Turkey, prov. Macedonia, cap. sanjak of same name, on the Vestrizza, 82 m. NNE. Yanina, and 90 WNW. Salonika. Pop. estimated at 15,000. It is the principal entrepôt for merchandise passing from Albania into Roumelia. It suffered great injury from fire in 1806.

Digitized by Google

MONDONEDO (an. *Britonia*). a city of Spain, in Galicia, cap. prov. same name, 30 m. NNE. Lugo, and 76 m. W. Oviedo. Pop. 2,452 in 1861. The town is situated on the N. side of the Asturian chain, and is old and irregularly built. Its principal public buildings are a cathedral, with 11 dignitaries and 24 canons, a par. church, 2 convents, now converted into hospitals, and a royal seminary and college. Linen-weaving, tanning, and brick-making are the only branches of manufacturing industry in the town; two large fairs are held in May and Oct., and the oak-timber of the neighbourhood is better adapted for building than any other in Spain.

MONDOVI, a town of North Italy, prov. Cuneo, on and round a hill near the Ellero, 12 m. E. by S. Coni. Pop. 16,952 in 1862. The town is divided into four parts; the town proper, called the Piazza. on the hill, at an elevation of 1,700 ft. above the level of the sea; and the three suburbs of Carassone, Bred, and Piano della Valle, built at its foot. The distance between the upper and lower part of the town is considerable, and the road by which they are connected is inconveniently steep. The town proper has a small citadel, and is surrounded with walls of no great strength, instead of ramparts. It has a great number of religious houses and churches; the latter including a cathedral, with a handsome altar and sacristy. Its inhabs. are chiefly clergy and country gentry, and it has very little commerce or wealth. The suburbs, on the contrary, are entirely devoted to trade, and have manufactures of woollens and cottons, with tanneries and iron forges; but the chief branch of industry is the spinning of silk.

Mondovi is the see of a bishop, and has several seminaries of education. It is comparatively modern, having been founded, according to an inscription on one of the chapels in the cathedral, in the year 1232. It was taken and sacked by the French, under Marshal Soult, in 1799. Beccaria, the natural philosopher, was a native of Mondovi; but he must not be confounded with the Marquis Beccaria, author of the famous treatise on crimes and punishments, who was a native of Milan.

MONGHIR, or MUNGGER, a town of British India, prov. Bahar, distr. Bhaugulpore, 80 m. E. Patna; lat. 25° 23′ N., long. 86° 26′ E. Pop. estimated at 30,000. It is finely situated on a bend of the Ganges, and is of great extent, its ramparts being about 1½ m. in length by 1 m. in width. The houses, however, are much scattered, and in one quarter only are so close as to resemble a town. Monghir, while a British frontier town, was a station of considerable importance. Though the houses are generally small, there are many with an upper story; and the roofs, instead of the flat terrace or thatch, as in Bengal, are generally sloping and covered with red tiles. The principal edifices are an old Hindoo temple, now occupied by some invalid soldiers; an elegant small mosque; the residences of the commandant and other military officers; and the remains of a palace built by a brother of Aurungzebe. The place has been from very early antiquity celebrated for its smiths, who derived their art from the Hindoo Vulcan, who had been solemnly worshipped, and was supposed to have had a workshop here. Monghir has also excellent gardeners and tailors. A great deal of clothing for the native army is made here, with shoes in the native and European fashion, furniture, palanquins, and carriages. There are several native schools, and the town is a station of the Baptist Missionary Society.

MONGOLIA, an extensive tract of country in the NE. part of Asia, and one of the colonial possessions of China, between the 35th and 52nd degs. of N. lat., and the 82nd and 123rd of E. long.; being bounded N. by the gov. of Irkutsk, NE. and E. by Manchooria, S. by China, and W. by Chinese Tartary. Length, from E. to W., about 1,700 m.; greatest breadth, 1,000 m.; area, about 1,400,000 sq. m. The limits, however, are subject, in consequence of wars among the tribes, to constant and great variation. Pop. conjectured to be about 2,000,000. Mongolia may be generally described as an elevated plain, almost destitute either of wood or water, enclosed southward by the mountains of Thibet, and northward by various offsets belonging to the great Altaic range. The central part of Mongolia is occupied by the great sandy desert, or Ta-Gobi, which stretches from SW. to NE. about 1,200 m., with a breadth, in some parts, of from 500 to 700 m. (See ASIA.) The most desolate part of the Gobi is called, by the Chinese, the Shamo, or sand sea, from its surface consisting of moveable sand. The desert is, however, intersected by some comparatively fertile tracts, and in other parts a few stunted trees are met with. The chief mountains of this region are, 1. the Altai and its various subordinate chains, extending eastward, under the names of Tangon, Khangai, and Kente, as far as the banks of the Amour, by which the range is deflected northward, and joins the Yablonoi-khrebet; 2. the Tchastaioola and Inchan ranges, which commence in lat. 42° N., long. 107° E., and curve NNE. and northward as far as the Amour, in lat. 53° N., where they join the Altai. The mountains of Inner Mongolia are very little known. The rivers are numerous, chiefly in the N., belonging to the basins either of the Irtish or Amour. Connected with the former are the Selenga, Orkhon, and Tula, which unite their streams and flow into lake Baikal; the Keroulun and Onon, which are tributaries of the Amour, rise near each other on opposite sides of the Kente range, and, taking a NE. course, unite in lat. 53° 30′ N. and long. 121° E. In the S. are the Leaou-ho, rising on the E. slope of the Irchan range, and falling into the Gulf of Leaou-tong, and several rivers in the region of Koko-nor, some independent and connected only with lakes, but others tributary to the Hoang-ho. The chief lakes S. of the great Gobi desert are Koko-nor, the Oring, and Dzaring, the two latter being near the sources of the Hoang-ho. Inner Mongolia has no lakes of any importance, and those in the N. region, inhabited by the Kalkas, are of inferior size; but Kobdo, the NW. district, is a country of lakes as well as mountains, the principal being Upsa-nor, Altai-nor, and that called the Ike-aral-nor, which receives the waters of the Djabkan, the largest internal river of Mongolia. The air of this country is cold, owing chiefly to its great elevation, but also to the abundance of sulphate of natron, with which the steppes are in many parts covered. Great quantities of snow and rain fall in the Kalkas country, where, also, fogs and heavy dews, with cold mornings, are common in the height of summer. There is no great diversity of soil throughout this vast territory, which is generally sandy, stony, and barren. The banks of the rivers and the mountain valleys abound in good pastures, and in some places there is land fit for tillage. The N. part of the Kalkas region, in particular, is well wooded, and would be very suitable for agriculture; but the people are wholly nomad, and averse to the formation of permanent settlements. The S. sides of the Altai abound also with gold and silver, but the Mongols seem entirely destitute of the knowledge necessary for the working of mines. S. of Ourga, in lat. 47° N., begin the arid steppes of Gobi: the

Digitized by Google

soil is gravelly, pasturage and water are rare, the grass is short and poor; yet in these tracts, so little favoured by nature, are to be seen numerous herds of large camels, vigorous horses and oxen, with flocks of sheep and goats, all in good condition. The steppes abound in salt, and the atmosphere is dry and bracing; but there is a total absence of wood, and the ground is quite unfit for agriculture. Caravans are liable to great hardships in passing through the desert, owing to the want of water and pasturage: the valleys, hills, and mountains offer nothing to the view but a yellow sand. S. of the 39th parallel the arid soil ceases, and is succeeded by lands well watered by rivers, and pretty well adapted to agriculture. Wheat is raised by the Mongols of Koko-nor, and also by those living more eastward, in the fertile districts near the great wall of China. The people, however, generally speaking, are too indolent to be good cultivators: they sow millet, barley, and wheat, but in small quantities, and in the most careless manner. Most of them, indeed, pass their whole lives in the open air, on the steppes, and disdain the laborious occupation of cultivating the ground.

'When we asked them,' says Du Halde, 'why they did not raise even a few vegetables in small enclosures, their prompt reply was, that herbs were the food of animals, whose flesh was the only proper support of man.' (Desc. de la Chine, iv. 38.) In fact, so great is their love of idleness, that, even in those countries which abound with wood and pasturage, they never make any provision for the winter, except, perhaps, a few stacks of hay; and, consequently, when there is a heavy fall of snow, and the cold is severe, they sometimes lose nine-tenths of their flocks and herds. The quadrupeds of Mongolia are the wild horse, wild boar, stag, goats of various kinds, bears, wolves, hares, foxes, sables, and squirrels: the birds are cranes, wild geese and ducks, moor-fowl, quails, and swans. Of the domestic animals it may be remarked that the horse, though small and shabby-looking, is strong and spirited; that the camels have two humps; and that the sheep are white, with long black ears, and furnish very delicate meat. The Mongols have dogs, but very few cats; and mules, as well as asses, are bred in large quantities by the tribe of Karatchin, immediately N. of the great wall.

Mongolia is composed of 26 aïmaks or principalities, all recognising the sovereignty of the emperor of China, and each governed by one of its oldest princes, called *taidshis*. The division of the Mongol hordes is founded on the necessity of a military administration; but all the officers superintend likewise the direction of civil affairs. According to this military division (introduced by the Manchoos), the whole nation is divided into 135 banners, which are again subdivided into regiments and companies. Each Mongol is bound to serve as a horseman from his 18th to his 60th year. The property of the soil is in the princes, to whom their subjects pay a moderate contribution of cattle, supplying them also with servants and shepherds for guarding their flocks and herds. These princes decide in the last instance all disputes between their subjects, according to the laws established to preserve order in their armies; but the supreme administration is confided to the tribunal of foreign affairs at Pekin, which appoints inspectors-general for the different principalities; these are always chosen from the Manchoo nation. With respect to the attachment of the Mongols to the present Manchoo dynasty of China (Ta-Thsing), it is difficult to speak positively. The Mongols still maintain their ancient hatred of the Chinese, and though the latter have been enabled to subdue the warlike spirit of these nomads, and to declare them tributary, the court of Pekin sends to Mongolia about ten times the value of the tribute received from it, under pretext of rewarding the zeal and fidelity of its princes and military officers. Thus the native Mongol chiefs are bribed into subjection and obedience; but they are, at the same time, vigilantly watched by the Manchoo inspectors, and any misconduct or show of opposition is speedily visited by an abridgment or deprivation of their usual presents. The religion of the Mongols is Buddhism, supposed to have been introduced in the seventeenth century. The temples are not numerous, nor are the lamas much distinguished from the common people by their knowledge and morals. They learn to read Tibetian, because the sacred books and services are copied and printed in those characters; but few of them are even tolerably acquainted with the language, or know the origin and meaning of the religious ceremonies. The lamas observe celibacy, and follow a strictly monastic life: there are also female recluses, who submit to an austere and holy life; but some are married.

The proper or E. Mongols are divided into three great nations; the Kalkas, northward, the Tshakhars, near the wall of China, and the Sunnit, who range over the great desert of Gobi. Their physical conformation, language, general habits, and history, have already been described at some length in the article Asia, in this work, to which the reader is referred for these particulars. The dress of the men is very simple, consisting of a long dark-blue robe, either of cotton or cloth, secured by a leather girdle; their shirts and under garments are of coloured nankeen, their boots of leather, and very thick: in winter they wear pelisses of sheep-skin and fur caps. The costume of the women resembles, in many respects, that of the men. The saddles and bridles of the Mongols are furnished with copper or silver. A bow and arrows, with a short sword, are the arms of a soldier; and muskets or rifles are used only in the chase. Their tents consist, like those of the Khirgiz, of a skeleton of osier, covered with felt, of which there are in winter three layers: the door commonly faces the S.; the hearth is in the centre; and the right side, near the entrance, belongs to the women. The tents of the common people are low, close, and disagreeable; but those of the richer Mongols are spacious and lofty, comprising two or three distinct apartments, the best of which is covered with a Persian or Turkish carpet. Milk, cheese, and butter, with a little mutton and game, form the chief food of this robust and active nation: brick-tea is the principal beverage of the rich as well as the poor. In summer, also, they drink *airak*, a fermented liquor made from milk, besides *koumiss* and brandy, purchased from the Chinese. Hunting, horse-racing, wrestling, and archery are their chief amusements: they seem to have no idea of dancing, but their songs are poetical and highly characteristic. The Mongols marry young: a plurality of wives is not forbidden, and divorces are frequent, the least discontent on either side being deemed a sufficient reason for the step. They generally bury their dead, but sometimes burn them, and occasionally even leave them exposed to the birds and wild beasts. Almost every Mongol is a skilful warrior and huntsman; but there are very few workmen or artificers; and, on examining his dress, furniture, and saddle, we find that he is supplied with everything by the Chinese, who give in exchange for horses, camels, oxen, and sheep, large quantities of brick-tea, tobacco, brandy, silk, cotton, and woollen fabrics, boots, and various uten-

Digitized by Google

sils in iron, tin, and copper. To carry on this trade, the Chinese go to Mongolia to the towns of Dolonnor and Kalgan, or to the great entrepôts of Kiakhta and Ourga, in the country of the Kalkas. The Mongols receive considerable profits from the conveyance of goods through their country: payment is made by the Chinese sometimes in silver, but more frequently in articles of merchandise.

MONMOUTH, a marit. co. in the W. of England, adjoining Wales, having N. the cos. of Brecknock and Hereford; E. Gloucester, from which it is separated by the Wye; S. the Bristol Channel; and W. Glamorgan, from which it is separated by the Rumney. Area, 576 sq. m., or 368,399 acres, of which 270,000 are supposed to be arable, meadow, and pasture. It is divided into two not very unequal parts by the Usk, which flows through it from N. to S.; the tract to the W. of that river being comparatively rugged and mountainous, and that to the E. comparatively level and well-wooded. The S. part of both divisions along the Bristol Channel, contains large tracts of marshy land; in some parts of a deep, rich, loamy soil; and in others, of a black peat earth. Large embankments have been raised in different places along the shore, to protect the marsh land from inundation. The soil, which is in general good, mostly consists, in the elevated grounds, of a red sandy loam, and in the valleys of a red clay; the substratum is frequently limestone. The arable land is generally clean, and in good order; but the rotation of crops might be a good deal improved. Draining is extensively practised. Cattle principally of the Hereford breed, and inferior only to the same breed in their native co. There are numerous orchards; and, in a few places, hops are cultivated. Stock of sheep estimated at from 170,000 to 180,000. There are some large estates; but property is, notwithstanding, a good deal subdivided. The size of farms varies from 60 to 300 acres, 140 acres being supposed to be about the average. They are generally held at will, and the want of leases is much and justly complained of. Principal minerals, coal, iron, and limestone. The abundance of these has led to the establishment of many very extensive iron works, especially in the N. and W. parts of the co., which are estimated to produce about 200,000 tons of iron. The access to the mines has been facilitated by the formation of canals and railways. A good deal of flannel is made in different parts of the co. Besides the Wye, Usk, and Rumney, it is watered by the Avon, Sirhowey, and Ebwy. Monmouth has 6 hundreds and 127 parishes, and sends 4 mems. to the H. of C., viz. 2 for the co., and 2 for the bor. of Monmouth. Registered electors for the co., 4,909 in 1865. At the census of 1861, the co. had 33,077 inhab. houses, and 174,633 inhabitants; while, in 1841, Monmouth had 24,944 inhab. houses, and 134,355 inhabitants.

MONMOUTH, a parl. bor., market town, and par. of England, cap. of the above co., hund. Skenferth, on the Wye, 25 m. N. by W. Bristol, 112 m. W. by N. London by road, and 144 m. by Great Western and South Wales railway. Pop. 5,783 in 1861. The town, which is well built, well paved, and lighted with gas, comprises a principal avenue, with other smaller streets, one of which leads to an old stone bridge over the Wye. The guildhall, in the market-place, is a neat and commodious edifice; and at the N. end of the town is a prison, externally of imposing appearance. The par. church, partly rebuilt in 1740, has a spire 200 ft. in height; the living is a vicarage in the gift of the duke of Beaufort. Another church stands at the SW. angle of the town, besides which there are four places of worship for Dissenters, with attached Sunday schools. A free grammar school was founded here in the reign of James I.; an infant school has recently been opened, and there is a large almshouse for 20 old men and women. The town is not flourishing in appearance, and, in point of prosperity, is said to be almost stationary. Independently of the conversion of pig-iron into bars, and of tin plates, the chief trade of Monmouth consists in the export of bark and timber to Bristol and Ireland, and the general supply of the neighbouring agricultural districts. Coal, for the use of the town, is obtained from the forest of Dean. Woollen caps were once largely manufactured *in Monmouth*. They are referred to by Shakspeare (Henry V., act v. scene 7); and it was ordered by the act 13 Elizabeth, cap. 19, that they should be universally worn on Sundays and holydays.

Monmouth, which was first incorporated in 1550, has been governed since the passing of the Mun. Reform Act by a mayor and 3 other aldermen, with 12 councillors: it has likewise a commission of the peace, under a recorder. The bor., in conjunction with Usk and Newport, has sent 1 mem. to the H. of C. since the 27th Henry VIII., the right of election down to the Reform Act being vested in burgesses residing within 7 m. of the bor. The electoral limits were left unchanged by the Boundary Act; and in 1865 Monmouth, with its contrib. bors., had 1,812 registered electors. It is also the principal polling-place and election-town for mems. of the co., as well as the chief town of a poor-law union. Markets on Saturday; wool fairs, Whit-Tuesday, June 18, and Sept. 4.

MONOPOLI, a sea-port city of South Italy, prov. Bari, on the Adriatic, 27 m. SE. by E. Bari, and 32 m. NNE. Taranto. Pop. 20,205 in 1862. The town stands on an eminence surrounded by a wall, and is defended by a castle. It is approached from the N. by a newly-built suburb, the small but regular houses of which have each a neat garden. The city has several churches, including a cathedral, which has a fine painting of St. Sebastian by Palma, and a chapel dedicated to the Virgin, and enriched with inlaid marbles of all colours. The town has 2 ports capable of accommodating vessels of large size; but the deepest is open to the N., and is consequently exposed to the *Bora*, or NE. wind, which often blows in the Adriatic with much violence. Monopoli has manufactures of cotton and linen cloths, and some trade in wine and olives. It is not very ancient, being probably built by the Greeks of the lower empire, partly with the ruins of *Egnatia*, which stood about 3 m. SE., and some traces of which still exist.

MONREALE, a city of Italy, island of Sicily, prov. Palermo, on a steep hill, 4 m. SW. Palermo, with which city it communicates by a good road and causeway. Pop. 15,638 in 1862. Monreale, though not a fine town, has several remarkable edifices. The cathedral, a large edifice founded in 1174, ranks next, after that of the cap.; for though heavy, and without symmetry, it has an imposing appearance. Its architecture is a mixture of Lower Greek and Saracenic, and its interior, above the pillars and arches, is wholly incrusted with mosaic work, representing different subjects from the Bible. A destructive fire, in 1811, did great injury to the structure; but the portions destroyed have been since rebuilt exactly in the former style. An adjoining Benedictine convent has a magnificent cloister, a large library, a collection of coins, and numerous paintings, including one of the finest pictures of the Sicilian artist, Novelli Monrealese. Near the town is also another rich Benedictine establishment, founded by Pope Gre-

Digitized by Google

gory the Great. Monreale is healthy, and commands fine prospects. Its vicinity is very fertile; corn, oil, and fruit being exported from it to Naples, Genoa, and other parts of Italy.

MONS (Flem. *Berghen*), a town of Belgium, prov. Hainault, of which it is the cap., on the Trouille, by which it is separated into 2 parts, 32 m. SW. Brussels, and 20 m. ENE. Valenciennes, on the railway from Paris to Brussels. Pop. 27,341 in 1862. The town is built partly on level ground, and partly on the declivity of a hill, crowned by a lofty tower, rebuilt in 1662 on the site of an ancient castle, said to have been erected by Julius Cæsar. Mons has been, since 1818, when its works were considerably augmented and strengthened, one of the principal Belgian fortresses. Its walls are flanked with 14 bastions, and on its E. sides are two extensive pools, by the aid of which, and the river, its ditches may be easily filled, and the environs laid under water. Without the walls are several suburbs. The town is entered by five gates; several of its streets are steep and winding, but they are in general wide, clean, well paved, and bordered with good houses, many of which are of stone. It has several good squares: of these the *Place d'Armes*, or great market-place, is the principal, and has in it the government-house, and the hall of the provincial council. The ramparts are planted with trees, forming pleasant promenades; and within the precincts of the citadel is a garden open to the public. The Trouille is here crossed by three bridges, and numerous stone pumps supply the town with water. The town-hall, erected, according to Vandermaelen, in 1440, is a large Gothic edifice, surmounted by a fine cupola. The church of St. Waudru, on the site of a chapel founded by that saint in the 7th century, is a fine specimen of Gothic architecture; and the church of St. Elizabeth is also handsome in some of its parts, but it has the incongruity of Gothic pillars supporting Corinthian capitals. The court-house, the new college, the military hospital designed by Vauban, the arsenal, the new barracks, the theatre, and the academy of arts, are among the most conspicuous public buildings. There are civil, orphan, foundling, and other hospitals, a house of correction, a workhouse, various asylums, a government loan-bank, and other charitable institutions.

Mons is the residence of a civil governor, and of a provincial and a municipal military commandant, and the seat of tribunals of primary jurisdiction and commerce, and a chamber of commerce. It had formerly a flourishing manufacture of lace, now much decayed, and several sugar refineries, which have been abandoned. It still, however, produces some woollen and cotton stuffs, gloves, cutlery, hardware, soap, and vinegar; and has copper and lead foundries, and flour-mills; but its chief source of wealth is in the numerous and productive coal mines by which it is surrounded, and which employ a great number of workmen and steam-engines. There are also extensive bleaching grounds in the vicinity. The coal from Mons is sent in part to Paris, by a long line of internal navigation, of which the canal from Mons to Condé forms a part. This canal, commenced by the French in 1807, and finished in 1814, is perfectly straight, 15 m. in length, with 7 locks, and at Condé joins the Scheldt. The greater part of it is in the Belgian territory; but a new branch of the *Canal d'Antoine* has been recently cut from it, avoiding France altogether, and entering the Scheldt not far from Tournay.

Mons has sustained many sieges. It was taken in 1691, by Louis XIV., after an obstinate defence; and was occupied by Eugene and Marlborough in 1709. The emperor Joseph II. demolished its former fortifications in 1784. During the French ascendancy it was the cap. of the dép. of Jemmappes.

MONTAGNANA, a town of Austrian Italy, deleg. Padua, cap. distr., on the Frassina, 22 m. SE. Padua. Pop. 7,657 in 1862. The town is walled; and has a castle, several churches, a hospital, and a high female school. It has manufactures of woollen and linen stuffs, hats, and leather, and a brisk trade in agricultural produce. It has several annual fairs, one of which lasts from Nov. 25 to Dec. 24. The hemp grown in the vicinity of this town is esteemed the best in Northern Italy.

MONTARGIS, a town of France, dép. Loiret, cap. arrond., at the confluence of the canals of Orleans, Briare and Loing, 39 m. E. by N. Orleans. Pop. 8,010 in 1861. Though ill-laid out, it is pretty well built; it is in part surrounded by old walls, and has the ruins of a large castle, in which the French kings often held their court. The par. church is remarkable for the elevation and boldness of its pillars and nave. Montargis has 2 hospitals, a small theatre, and manufactures of coarse woollen cloths.

MONTAUBAN, a town of France, dép. Tarn-et-Garonne, of which it is the cap., on an eminence on the banks of the Tarn, crossed here by a brick bridge of 7 arches, 122 m. ESE. Bordeaux, on the railway from Toulouse to Bordeaux. Pop. 27,054 in 1861. The town, properly so called, is small, and irregularly laid out, with narrow ill-paved streets, lined by old houses having projecting gables; but the suburbs, which are of considerable extent, present a totally different appearance, having straight, wide, and regular streets, with new, large, and elegant mansions. It has three public squares; that of the Prefecture, the *Place-d'Armes*, and the *Place Impériale*, the last of which is spacious, and has many handsome houses. The chief public buildings are the cathedral, a cruciform structure with 2 towers; the town-hall, a large and fine square edifice; the church of St. James, with a lofty brick tower and steeple; the prefecture, bishop's palace, the public library with 11,000 vols., a small theatre, and several hotels. Near the prefecture commences a noble avenue, shaded with 6 rows of acacias, leading to the terraces of some adjacent promenades, which command extensive prospects of the surrounding country. The beautiful situation of Montauban, the purity of its atmosphere, the good quality, as well as abundance, of its water, and the cheapness of all the necessaries of life, render it a pleasant and favourite retreat for persons of small fortune. It is the seat of a tribunal of primary jurisdiction, and has a chamber of manufactures, a society of agriculture and science, and a communal college. It has manufactures of serges, flannels, coarse cotton fabrics, and silk stockings, earthenware, soap, brandy, starch, leather, and beer. It likewise carries on a considerable retail trade, and is a large entrepôt for corn.

Montauban was built in the beginning of the 14th century, and owes its foundation to the protection afforded by the Count of Toulouse to the oppressed vassals of certain barons, who claimed, among other privileges, that of *prélibation*. It afterwards acquired celebrity on account of its early adherence to the cause of the Huguenots, and its great sufferings in their behalf. In 1621 it successfully resisted an army under Louis XIII.; but a few years subsequently, after the siege of Rochelle, it was compelled to open its gates to

Digitized by Google

that monarch. A few years after it was exposed to the *dragonnades*, that disgraced the reign of Louis XIV. This was the last disastrous event connected with the town, which has since gradually risen to its present importance.

MONTBRISON (an. *Mons Briso*), an ancient town of France, dép. Loire, of which it is the cap. 237 m. SSE. Paris, on a branch line of the railway from Lyons to Le Puy. Pop. 7,201 in 1861. The town was formerly fortified, and is irregularly laid out with narrow streets and low shabby houses. A cathedral, founded in 1205, and still in an unfinished state, a prefecture, hospital, college, with a library of 15,000 vols., theatre, corn-exchange, and infantry barracks are the principal buildings; but the cathedral only has any architectural beauty. Though the cap. of a dép., and the seat of a tribunal of primary jurisdiction and commerce, and of a society of agriculture, Montbrison is very unimportant, having no manufactures, and only a limited retail trade.

MONT-DE-MARSAN, a town of France, cap. dép. Landes, 64 m. S. Bordeaux, on the railway from Bordeaux to Tarbes. Pop. 5,574 in 1861. The town is situated on the side of a declivity close to the navigable river Midouze (crossed here by a stone bridge of two arches), and is clean, well-paved, and regularly laid out, the principal buildings being the par. church, townhall, court of justice, college, public baths, barracks, a small theatre, and a library with 1,300 vols. The suburbs are planted with trees, and laid out in walks. It has manufactures of coarse woollen cloths, blankets, and sail-cloth; and some trade, with Bayonne, in wine and brandy. It is the seat of a tribunal of primary jurisdiction, and of a society of agriculture and commerce.

MONTEFIASCONE, a town of Central Italy, prov. Viterbo, on a mountain, 9 m. NNW. Viterbo. Pop. 5,453 in 1862. The town has a fine cathedral, and many other religious edifices, but is celebrated principally for its light, white, muscadel wines; but these, as they do not bear carriage, are seldom met with out of the country where they are produced.

MONTELEONE (an. *Hipponium* and *Vibo Valentia*), a town of South Italy, prov. Catanzaro, cap. of a distr. on a mountain, 27½ m. SW. Catanzaro. Pop. 10,310 in 1862. Its commanding situation, with its fine old castle, gives it a fine appearance from without; but its streets are crooked and ill-paved, and the houses mostly low and of wood. There are several churches, in which are some good pictures, and a royal college. The inhabs. are principally engaged in the tunny fishery, and in trading in silk and oil. According to Strabo (vi. 256), Hipponium was founded by the Locri Epizephyrii. After many vicissitudes it became a Roman colony, and Cicero calls it *illustre et nobile municipium*. It had a fine temple of Proserpine, demolished by Count Roger of Sicily, who applied the materials to the construction of the abbey at Mileto, 6 m. distant.

MONTELIMART, a town of France, dép. Drôme, on the Jabron, near its confluence with the Rhone, 70 m. S. Lyon, on the railway from Lyon to Marseilles. Pop. 12,044 in 1861. The town is surrounded with walls, and is generally well-built, the chief street being wide and paved with basalt. It has four handsome gates, and a well-planted public walk along the walls, which adds greatly to its beauty. Near the town is a mineral spring, highly esteemed for its medicinal qualities, and the neighbourhood is remarkable for the abundance and variety of its fruits. The manufacture of figured silks is the only important branch of industry; but it has a considerable retail trade, and is the chief entrepôt of an extensive and highly productive district. It was unsuccessfully besieged by Coligni in 1567.

MONTENEGRO, or MONTENERO (the Black Mountain), a small state under the suzerainty of Turkey, having N. the Herzegovina, E. and S. Bosnia and Albania, and W. a narrow strip of Austrian Dalmatia, by which it is separated from the Adriatic. It lies between 42° 10′ and 43° 10″ N. lat., and 18° 41′ and 19° 30′ E. long. Area estimated at about 1,800 sq. m., and pop. at from 100,000 to 110,000. Though it has a few narrow valleys, the surface, marked by the southern ramifications of the Dinaric Alps, is generally mountainous and rugged. 'Its aspect is that of a succession of elevated ridges, diversified here and there by a lofty mountain peak, and in some parts looking like a sea of immense waves formed into stone.' (Wilkinson's Dalmatia and Montenegro, i. 411.) It is well watered, the rivers flowing SE. into the Moracca, which falls into Lake Scutari. The mountains consist wholly of limestone. Trees and shrubs grow amid the crags; and timber, if it could be brought to a market, would be an important article. The country, except in the parts adjoining Lake Scutari, is very unfertile. The principal products are Indian corn, potatoes, which have been extensively introduced, with wine, olives, tobacco, and various descriptions of fruits. Horses are scarce; but there is no deficiency of cattle; and sheep, goats, and pigs are abundant, smoke-dried mutton, hams, which are highly esteemed, and wool, constituting a principal portion of the exports. Fish, mostly obtained from Lake Scutari, is an important product, the value of the exports, ex. the home consumption, amounting to 14,000 or 16,000 florins a year. Wax and honey are, also, considerable articles. The manufactures, if so they may be called, are wholly domestic. The principal are *strucche*, or woollen stuffs. Few Montenegrins exercise any peculiar trade, though some perform the functions of blacksmiths and farriers. Guns and other arms are of foreign manufacture, many having been taken from the Turks.

The country is divided into 8 *nahiyes* or departments. There are but few towns, and the largest does not contain more than 1200 inhabitants. Cettigne, near the centre of the country, is the capital. The inhabitants are of Slavonic origin, well made, robust, and active; they belong to the Greek Church, are superstitious, devoted to their priests, and especially to their bishop. The latter, the *vladika*, or sovereign, is at once high priest, judge, legislator, civil governor and commander-in-chief. He is not, however, despotic, but is assisted, and sometimes controlled, by a senate consisting of the heads of the principal families. The dignity of Vladika is hereditary. Every man capable of bearing arms is a soldier, so that a very considerable force can on an emergency be brought into the field.

Living in mountain fastnesses, and having little intercourse, unless it be of a hostile description, with others, the Montenegrins have the virtues and vices incident to their situation. They are alike distinguished by their love of independence, their vindictiveness, jealousy, and barbarism. The Turks have on numerous occasions invaded Montenegro with large armies; but the inaccessible nature of the country and the bravery of its defenders have uniformly occasioned their defeat. In these contests the greatest barbarity has been displayed on both sides. The Montenegrins frequently retaliate on the Turks by making predatory incursions into their territories, and sometimes, also, into those of the Dalmatians. They

Digitized by Google

are always armed, and give no quarter except to those who surrender before the combat begins. If a Montenegrin be severely wounded, and his comrades cannot carry him off, they cut off his head. And this, of course, is the treatment experienced by such of their enemies as fall into their hands, the skulls of the latter being preserved as trophies of their valour. Latterly, however, some efforts have been made to mitigate this excess of ferocity; and they are allowed, on all hands, to be kind, courteous, and hospitable to strangers.

Russia has, for a lengthened period, had a preponderating influence in Montenegro.

MONTEPULCIANO, a town of Central Italy, prov. Sienna, on a lofty hill, 27 m. SE. Sienna. Pop. 12,273 in 1862. The town is surrounded by a wall with battlements, and has numerous ecclesiastical establishments, a college, a hospital, and manufactures of soap, oil, and wine flasks. It is celebrated for its dessert wine, which is preferred by Redi to all other wines:—

'Montepulciano d' ogni vino è il rè.'
Bacco in Toscana.

MONTEREAU (an. *Condate*), a town of France, dép. Seine-et-Marne, at the confluence of the Seine and Yonne, each of which is crossed here by a stone bridge, 42 m. SE. Paris, on the railway from Paris to Lyons. Pop. 6,217 in 1861. The town has a fine open market-place, and is well-built, clean, and respectable: a par. church, town-hall, hospital, and three hotels are the only public edifices of any importance. It is the seat of a tribunal of commerce, and has an extensive manufacture of earthenware, with some tan-yards, and a considerable trade with Paris, chiefly in corn, flour, and wood for fuel.

MONTEVIDEO, a fortified sea-port city of S. America, cap. of the repub. of Uruguay, on a peninsula extending into the estuary of the Plata on its N. side, 125 m. E. by S. Buenos Ayres; lat. 34° 54′ 11″ S., long. 56° 13′ 18″ W. Pop. estimated at 29,300 in 1863. The town is well fortified, and has a citadel. The houses, which are of stone or brick, are seldom above one story in height: they are flat-roofed; and timber is so scarce, that their floors consist, for the most part, of brick or bare earth. The streets being unpaved, are either clouded with dust, or loaded with mud, as the weather happens to be dry or wet. The city is ill-supplied with water, which has to be brought from a well 2 m. distant, or from pits dug near the seaside; or is else merely rain-water, collected in cisterns. There are but few public buildings, and those of no great importance; the cathedral is said to be a handsome edifice, but it is badly situated.

The port of Montevideo is the best on the Plata. It is a large circular basin, open to the SW.; generally the water is shallow, not exceeding from 14 to 19 ft.; but the bottom being soft mud, vessels are seldom damaged by grounding. However, the depth of water in the harbour, as well as throughout the whole of the Rio de la Plata, depends very much on the direction and strength of the winds. The harbour is exposed to the pamperos, or SW. winds, which sometimes blow with so much force and continuance as to cause the rise of a fathom or more in the depth of water; but they rarely do any damage to vessels properly moored with anchors to the SW. and SE., and one to the N. On the opposite side of the bay is a mountain called Montevideo, whence the city has derived its name; on its summit is a light-house, having the lantern 475 ft. above the sea.

Montevideo has considerable commerce; the imports principally consist of British cottons, woollens, and hardware; flour, wine and spirits; linens, sugar, tobacco, boots and shoes. The great articles of export consist of animal products. The subjoined table gives the number of vessels of various nations which entered the port in the year 1863:—

Flags	Vessels	Tons
Argentine . . .	14	1,985
British	146	57,519
Belgian	9	2,576
Brazilian . . .	108	28,224
Dutch	42	9,330
Danish	17	2,924
French	111	45,216
Hanseatic . . .	25	11,397
Italian	122	34,256
Swedish and Norwegian	11	2,784
Portuguese . . .	23	6,630
Spanish . . .	214	36,395
American (U. S.) . .	80	50,258
Uruguayan . . .	29	6,404
Prussian . . .	3	744
Other Countries . .	14	1,695
Total . . .	968	297,737

Montevideo was founded by a colony from Buenos Ayres, and its possession was long a matter of dispute between the Spaniards and Portuguese. It was taken by the Brazilians in 1821; and became, in 1828, the cap. of the new republic of Uruguay.

MONTGOMERY, an inland co. of N. Wales, having N. Merioneth and Denbigh, E. Salop, and S. and W. Radnor and Cardigan. It is oval-shaped, and contains 755 sq. miles, or 483,323 acres. The Berwyn Mountains divide this co. from Merioneth; and, with the exception of some considerable valleys, of which that of the Severn is the most extensive and that of Llangollen, partly in this co., the surface is, for the most part, rugged and mountainous. The soil is various; but in the vales it is generally clayey, and in parts very fertile; on the whole, however, the land under tillage is not supposed to exceed from 70,000 to 80,000 acres. The Severn has its source at the extreme W. confines of this co., on the skirts of 'huge Plynlimmon;' and runs in a NE. direction, parallel to, and not very distant from, its S. boundary, till it unites with its important affluent the Vyrnwy, which also belongs to this co., on the borders of Salop. The agriculture of this co., especially in the vales and along the border of Salop, has been a good deal improved; but withal it is extremely similar to, and quite as backward as, that of Denbigh and Merioneth. The climate, though moist, is mild and salubrious. The vales of this co. have been long celebrated for a superior breed of horses. Montgomery has, also, long been, and still continues to be, the best wooded co. in Wales. It was formerly regarded as one of the principal sources of the supply of oak timber for the navy; but many of its finest oak woods have been cut down; and though a good deal of new wood has been planted, it is doubtful whether it be sufficient to supply the place of that which formerly existed. There are a number of fine and commodious farm-houses and offices; but, in general, they are very defective, and the cottages are quite as bad as in Merioneth. Slate is generally diffused over the co., and forms, indeed, the basis of the mountains. Slates are quarried at Llangynog and other places; coal is raised on the borders of Salop; and there are some lead mines, but none that are very productive. Montgomery is the principal seat of the Welsh flannel manufacture, which is extensively

Digitized by Google

carried on at Newtown, Llanidloes, Machynlleth, and Welshpool. The co. is divided into 9 hunds. and 47 pars. It sends 2 mems. to the H. of C., viz. 1 for the co., and 1 for the town of Montgomery and its contributory bors. Registered electors for the co., 3,339 in 1865. At the census of 1861, the co. had 13,501 inhab. houses, with 66,919 inhab., while, in 1841, Montgomery had 13,643 inhab. houses, and 69,219 inhab.

MONTGOMERY, a parl. bor., market town, and par. of N. Wales, cap. co. of its own name, 20 m. SW. Shrewsbury, 146 m. WNW. London, by road, and 175 m. by London and North Western railway. Pop. 1,276 in 1861. Though small, it is a clean well-built town, in a hollow at the foot of a high hill. The guildhall stands on an eminence near the ruins of an ancient castle, close to which is the co. gaol, a modern stone building, well adapted for its purpose. The church, a cruciform structure, in the Early English style, has a handsome tower, erected in 1816, and an exquisitely carved screen, and some curious monuments; the living is a rectory in the gift of the crown. The Calvinists and Wesleyan Methodists have also their respective places of worship, and there are two Sunday schools and a small endowed school. No trade or manufacture is carried on in the town, and it deserves notice merely from its being the cap. of a co. and a parl. bor. It was incorporated by Henry III. under a steward and 12 burgesses; who enjoyed, till the passing of the Reform Act, the privilege of sending one mem. to the H. of C. This act, however, made Llanfylline, Llanidloes, Machynlleth, Newtown, and Pool, contributory bors. with Montgomery in the election of the mem. Registered electors for the entire district, 954 in 1865. The election for the co. takes place here, and sessions are held alternately with Newtown. Markets on Tuesday; fairs, March 26, first Tuesday in May, June 7, Sept. 4, and Nov. 14.

Montgomery is very ancient: its castle was built prior to the Norman Conquest, and, from its size and strength, was frequently an object of contention during the wars between the English and Welsh. In 1354 it was in the possession of Roger Mortimer, from whom it passed to the crown. In the 15th century, the stewardship of the town and castle was granted to the Herberts of Cherbury. The famous Lord Herbert, celebrated alike for his chivalry, wit, and learning, was born here in 1581. It is the birthplace, also, of the late Dr. Abraham Rees, the learned editor of the voluminous and valuable Cyclopædia which bears his name.

MONTILLA (an. *Montulia*), a town of Spain, in Andalusia, prov. Cordova, 19 m. S. by E. Cordova. Pop., 12,696 in 1861. The town is well built, and has two par. churches, an orphan asylum, three hospitals, a royal school of Latin and rhetoric, and a bonding warehouse for wine. Its trade is considerable, chiefly with Cordova, both in manufactured goods and farm produce, particularly wine, horses, mules, and horned cattle, which, though small and ungainly in appearance, are very hardy and serviceable. An annual fair is held in Sept., and well attended.

MONTLUCON, a town of France, dép. Allier, cap. arrond. on the Cher, close to the canal De Berri, in a valley bordered by vine-clad hills, 38 m. WSW. Moulins, and 171 m. S. by E. Paris. Pop. 16,212 in 1861. The town was formerly fortified, and is well built and well situated. A par. church and hospital are the only public buildings. It produces some coarse woollen and linen fabrics, and has a considerable trade in corn, wine, cheese, and cattle.

MONTMARTRE, a town of France, dép. Seine, forming one of the northern suburbs of Paris, on a conical hill of the same name, commanding an extensive view of the French metropolis and its suburbs. Montmartre is one of the favourite resorts of the Parisians on Sundays and holydays, and comprises several inns and other houses of entertainment, with many villas and private residences. An asylum for 60 old men, a private lunatic establishment, and several schools, have been founded here, and it has oil-cloth manufactories, scagliola works, and woollen mills, with mines of gypsum, which supply the whole of Paris with plaster. In 1814 the hill was fortified by the Parisians, who defended it for a day against the Allies.

MONTPELLIER (Lat. *Mons Pessulanus*), a city of France, dép. Hérault, of which it is the cap., on the Lez, about 5 m. from the Mediterranean, and 77 m. W. by N. Marseilles, on the railway from Marseilles to Toulouse. Pop. 51,865 in 1861. The town is beautifully situated on the declivities of a low hill, commanding views of the Alps, the Pyrenees, the Cevennes, and the sea. It was formerly walled, and a place of considerable strength; but, of its ancient fortifications, there are now only a few gates, a tower, and some portions of the wall on the NE. side of the city. It still, however, has, at one extremity, a citadel built by Louis XIII.; while, at its other extremity, is the *Place* or *Promenade de Peyrou*, one of the noblest public walks in Europe. This place is entered by a Doric arch, and ornamented with long lines of balustrades, covered ways, various sculptures, a bronze equestrian statue of Louis XIV., and numerous fountains, including a magnificent hexagonal *château d'eau* of Corinthian architecture. This, like the other public fountains of Montpellier, is supplied by an aqueduct about 8½ m. in length, constructed in the middle of the last century; and which, for a distance of 880 metres, or more than ½ m., is raised on a double row of stone arches, and, in point of elegance, rivals the boasted *Pont du Gard*. Between the town and the ramparts of the citadel is the Esplanade, a fine open space planted with trees and ornamented with reservoirs. The boulevards surrounding the town also afford good public walks, and in the outskirts are many newly-built and handsome terraces. The city itself is very ill laid out; its streets are narrow, steep, and winding, and its squares small and irregular; but its houses are generally good, and it is kept remarkably clean. Of eight churches, none demand any particular notice. The cathedral is distinguished from the rest only by being larger; a singular-looking porch, and a tower at three of the angles of the nave, are the principal external ornaments of this edifice. Adjacent to it is the School of Medicine, occupying what was formerly the bishop's palace, a large building with several fine apartments. This school, founded by the Arabs driven from Spain in 1180, enjoys a high and well-deserved celebrity, as one of the best conducted establishments of its kind in France, and is all that now remains of the once famous university of Montpellier. It has a new and fine amphitheatre; an examination hall, in which is an antique bronze bust of Hippocrates; a council-hall, with portraits of professors from the period of the 13th century, including also a portrait of Rabelais; a library, with 35,000 vols., including many editions of the 15th century, and 600 valuable MSS. in different European and Asiatic languages; a pretty extensive anatomical museum, and several spacious laboratories. The general hospital has accommodation for upwards of 600 patients, and there are large and well-conducted lunatic and lying-in hospitals.

The botanic garden of Montpellier, which dates

Digitized by Google

from the reign of Henri IV., was the first established in France, and, though small, comprises 8,000 species of plants; it is one of the four principal and best arranged botanic gardens in the kingdom, which distinction it owes to its having been the scene of the labours of the late celebrated M. de Candolle. The garden has, in one of its most sequestered parts, the tomb of Narcissa, the daughter-in-law of Young, whose funeral the poet has vividly described in 'Night the Third.' One of the principal attractions in Montpellier is the museum, founded, in 1825, by the Baron Fabre, a native of the town. It occupies four spacious and well-lighted halls, and comprises collections of paintings, engravings, statues, medals, and other objects of *virtù*, and a library of 15,000 vols., the whole estimated to be worth 2,000,000 francs. The theatre, built in 1786, is well planned, and capable of accommodating 2,000 persons. The palace of justice, the town-hall, exchange, prefecture, admiralty, barracks, several prisons, including a central prison, with workshops, the Calvinist chapel, and synagogue, are the remaining principal buildings.

Montpellier is a bishop's see, the cap. of the ninth military division of the kingdom, and the seat of a royal court for the dépts. Aude, Aveyron, Hérault, and Pyrénées-Orientales, a court of original jurisdiction, a tribunal, and a chamber of commerce, boards of taxation, customs, artillery, and engineering, an university, academy, and a royal college. It has schools of veterinary medicine, engineering, drawing, architecture, geometry, and music; societies of agriculture, arts and sciences, medicine, and archæology, a government loan-bank; Protestant Bible societies, a prison society; and numerous other charitable associations, and several asylums. It has manufactures of woollen cloths, cotton handkerchiefs, muslins, table and other linens, hats, silk, cotton, and woollen hosiery; with cotton-thread factories, distilleries, sugar refineries, breweries, and chemical works. It is connected with its port Cette, 17 m. SW. by a railway, and has a brisk trade with it, and with other towns and villages, exporting large quantities of fresh and dried fruits, wool, and other kinds of rural produce, in addition to its manufactured products. It was formerly a place of great resort for English invalids, on account of the alleged salubrity of its climate.

Montpellier has given birth to many distinguished persons, among whom may be specified Chaptal the chemist, Cambacères, and Daru the historian. It appears to have been founded in the 8th century, and was for a while dependent on the kings of Majorca. It was acquired by Philip of Valois in 1349, but was not finally annexed to France till the reign of Charles VI. The Calvinists got possession of it under Henry III., and held it till 1622, when it was taken after a long siege by Louis XIII.

MONTREAL, a town and river port of British America, and the chief seat of the commerce of Lower Canada; on the S. side of the island of Montreal, in the St. Lawrence, 142 m. in a direct line SW. Quebec. Pop. 101,602 in 1861. The site of the town is not so commanding as that of Quebec, but it is in every other respect superior to that city. It is not so crowded, and some even of its older streets are of tolerable breadth. Montreal is divided into the Upper and the Lower Town; the difference in their elevation is but slight, but the former, being the more modern, is the handsomer division. It has several suburbs, including which it stretches along the river for 2 m. from N. to S., and has, for some distance, a nearly equal breadth inland. The battlemented wall, with which it was formerly surrounded, has long fallen into decay, and it is now entirely open, the wooded heights around being covered with villas and pleasure grounds. In the Lower Town, Paul Street, the chief commercial thoroughfare, extends parallel with the river the whole length of the city; and, in the Upper Town, several streets proceed in the same direction, communicating with Paul Street by cross streets. In the Upper Town and suburbs, which are mostly inhabited by the principal merchants, many of the houses are handsomely and solidly built in the modern style; but in the Lower Town they are principally of a gloomy looking grey stone, with dark iron window shutters and tinned roofs. Along the bank of the river is an extensive line of quays and warehouses. Many of the houses in the suburbs are built of wood, but there are no wooden buildings within the space once encompassed by the walls; and this city and Quebec have more of the aspect of old European towns than any other towns in America.

The most remarkable public edifice is the Rom. Cath. cathedral, opened in 1829, and superior to any other church in British America. It is of Gothic architecture, 255½ ft. in length by 134½ in breadth. It is faced with stone, and roofed with tin, and has 6 towers, of which the three belonging to the main front are 220 ft. in height. On the roof is a promenade, 76 ft. in length by 20 in breadth, elevated 120 ft. The principal window is 64 ft. in height and 32 in breadth. The interior is capable of accommodating from 10,000 to 12,000 persons, who may disperse by numerous outlets in 5 or 6 minutes. It comprises 7 chapels, and 9 spacious aisles. There are several other Rom. Cath. churches, mostly belonging to the order of St. Sulpice; to the members of which Montreal chiefly owed its foundation, and who still hold the seigniory of the island upon which it stands.

The seminary of St. Sulpice, a large and commodious building adjoining the cathedral, occupies three sides of an oblong area, 132 ft. in length by 29 deep, and is surrounded by spacious gardens. A handsome additional building, 210 ft. by 45 ft., has been erected, at an expense of 10,000*l*. In these establishments, students in most of the higher branches of learning are taught at very moderate charges. The principal English church is a handsome building in the Grecian style, surmounted by a high and beautiful spire. It has also a Scotch kirk, an American Protestant church, and chapels belonging to the Methodists and Scotch dissenters. The Montreal General Hospital, erected in 1821–2 by voluntary subscription, a large and well-built edifice, is said to be one of the best regulated institutions of the kind in America. A large conventual structure, the *Hôtel Dieu*, occupied by a superior-matron and thirty-six nuns, is appropriated to the reception of the sick and indigent; and the convent of the Grey Sisters partly serves as an asylum for the aged and infirm, the insane and foundlings.

The *Sœurs Noires* have an extensive convent, founded in 1650; its inmates consist of a superior and 60 nuns, whose duties are directed to the education of young girls. The court-house and prison are substantial buildings, occupying the site of the former college of the Jesuits. The government-house, bank, barracks, ordnance-office, and 4 market-houses are among the remaining principal buildings. In one of the squares is a colossal statue of Nelson, placed on a Doric column, the pedestal of which has bas-reliefs representing his principal actions. Besides the educational establishments noticed above, Montreal has a college, with a principal and 4 professors, a royal

Digitized by Google

grammar-school, parochial, union, national, Sunday and other public schools; and many good private French and English seminaries. The university of M'Gill college endowed by a citizen of Montreal, in 1814, with a valuable estate, and 10,000*l.* in money, and chartered in 1821, is conducted on a liberal and enlarged scale. Montreal has a penitentiary, a house of industry, a savings' bank, a natural history society, a mechanics' institution, a central auxiliary society for promoting education and industry, Bible and tract, agricultural and horticultural societies, and several public libraries.

There is much activity observable among all classes connected with trade. The position of Montreal at the head of the ship navigation of the St. Lawrence, and near the confluence of that river with the Ottawa, as well as its situation with respect to the United States, necessarily make it one of the greatest emporiums of America. The harbour, though not large, is secure, and vessels drawing 15 ft. water may lie close to the shore. Its general depth of water is from 3 to 4½ fathoms. Its chief disadvantage consists in the rapid of St. Mary's, about 1 m. below, which vessels often find it difficult to stem. To obviate the obstructions in the navigation above Montreal, the Lachine canal, 9 m. long, 20 ft. wide, and 5 ft. in depth, was undertaken in 1821, and completed at an expense of 130,000*l.* The communication with the opposite sides of the river is carried on by steam vessels; and, during the summer, a regular steam communication is kept up with Quebec. At this season, vast rafts of timber come down, and pass the city for Quebec; and scows, bateaux of about 6 tons, and Durham boats, bring to Montreal the produce of Upper Canada. Neither is the trade of Montreal suspended in winter, like that of Quebec. Thousands of sledges may then be seen coming in from all directions with agricultural produce, frozen carcasses of beef and pork, firewood, and other articles. Montreal is the centre of the commerce between Canada and the U. States, carried on by Lake Champlain and the Hudson; and not only is it the depôt of all the adjacent country, but most of the business done in Quebec is carried on by branches from the Montreal houses. Formerly this city was the head-quarters of the fur trade, but its interest in it has greatly declined. It has, however, cast-iron foundries; distilleries; breweries; soap, candle, and tobacco manufactories; several ship-building establishments; and machinery for steam-engines. Various articles of hardware, linseed oil, and floor-cloth are made in the town. The markets are abundantly supplied with good butchers' meat, fish, poultry, fruit, and vegetables.

About three-fourths of the pop. are of French descent; the remainder, consisting principally of emigrants from the United Kingdom, Americans, and Iroquois Indians. Montreal, originally called Villemarie, was taken from the French, in 1760.

MONTROSE, a royal and parl. bor. and sea-port town of Scotland, co. Forfar, at the mouth of the S. Esk, on the N. side of the river, on a projecting tongue of land, between the German Ocean on the E. and the basin of Montrose on the W., 60 m. NNE. Edinburgh, on the railway from Edinburgh to Aberdeen. Pop. 13,443 in 1861. The town consists of one wide and regular street, extending from N. to S. upwards of ½ m., with numerous closes and subsidiary streets. Many of the houses present their gables to the street, as in the Netherlands. It is a handsome town, well-paved, lighted with gas, and supplied with water, conveyed, in pipes, from a distance of 3 m. The public buildings are the town-hall, gaol, lunatic asylum, academy, trades' school, infirmary, house of refuge, parish church, with a handsome steeple, 200 ft. high; 2 Free churches, St. John's and St. George's; 7 dissenting churches, of which 2 belong to the United Presbyterian body, and the others to the Methodists, Baptists, Glassites, and Independents. The narrow downs, provincially *links*, between the town and the sea, are much resorted to by the inhabitants for golf-playing; a game which is in great favour here and in various other places in Scotland.

The most important public structure connected with Montrose is the suspension-bridge, completed in 1829, over the principal branch of the South Esk, and uniting the town with the Inch. The distance between the towers at the extremities of the bridge is 432 ft., the height of each tower is 71 ft.; the width of the bridge is 26 ft. within the suspending-rods. The whole cost above 25,000*l.*; the pontage levied amounts to about 1,200*l.* a year. The extent of the Inch is less than ¼ m., and the branch of the river on the opposite side is crossed by a drawbridge; so that the communication across the two channels of the South Esk is as perfect as possible.

Montrose has been long celebrated for its schools. It was the first place, in Scotland in which Greek was taught (M'Crie's Life of Knox, vol. i. App. n. C.); and it has preserved the character which it so early (1534) attained. Of the schools, two are entirely free; one, founded in 1816, by a Mr. White, educates 100 poor children; and another, founded in 1822, by Miss Stratton, educates 42 boys and as many girls. Five schools are partially endowed, the others are voluntary and unendowed seminaries. Andrew Melville, who was born in the neighbourhood, was educated at the grammar-school of Montrose. George Wishart, who suffered martyrdom, was also educated here, and subsequently held the office of teacher in the same school. The celebrated Marquis of Montrose, who made so distinguished a figure in the civil wars in the 17th century, was a native of the town. Archbishop Leighton was descended of a family whose seat was within 2 m. of the bor.

The harbour is one of the best on the E. coast of Scotland. The channel of the river is narrow; but, as it has 15 or 18 ft. water over the bar at low ebb, middling-sized merchantmen may run in at any time of the tide; and, at high water, it is accessible to the largest ships. A wet dock has been excavated below the old harbour, at the cost of about 50,000*l.* The basin is nearly circular, being about 3 m. in diameter: it is shallow, and, excepting the channel of the river, dries at low water. Vessels of 50 or 60 tons, however, reach Old Montrose, at the other end of the basin. The entrance to the harbour has, on its N. side, 2 light-houses, with fixed lights.

On the 1st of January, 1864, there belonged to Montrose 11 sailing vessels under 50, and 99 above 50 tons, besides two small steamers, of the aggregate burden of 40 tons. The gross amount of customs duties received in 1863 was 14,919*l.* The trade of the port has considerably increased of late years. The chief imports from foreign countries are flax, hemp, and timber. The great articles of export are canvass and coarse linens, corn, cattle, smoked haddocks, pork, and potatoes. Previously to 1839, 3 or 4 ships sailed annually to the Greenland whale fishery, but this branch of trade has been abandoned. The majority of the ships belonging to the port are now engaged in the Baltic trade. The steamers that ply between Leith and the N. of Scotland regularly call at Usan, 2 m. S. of Montrose; and a steamer, belonging to the town, plies to Leith. A direct trade is

Digitized by Google

carried on with London by the agency of schooners and smacks.

Montrose was created a royal bor. by David I. in the 12th century. It was here that John Baliol, in 1296, surrendered the Scottish crown to Edward I. Montrose was the first port made by the French fleet, in 1715, with the Pretender on board; and the same personage sailed from it in February, 1716. Joseph Hume, esq., the financial reformer, was a native of Montrose, where he was born in 1777.

MONTSERRAT, one of the British W. India Islands, a dependency on Antigua, from which it is distant SW. 27 m.; in lat. 16° 45′ N., long. 61° 6′ W. It is about 12 m. in length, and 5 m. in its greatest breadth. Pop. 7,645 in 1861, of whom 3,447 males and 4,198 females. Montserrat consists of a range of steep abrupt mountains, or rather of one lofty mountain, 2,500 ft. high, the summit of which has been broken into a variety of deep precipices and chasms. The upper parts are altogether barren; but the base of the mountain slopes off to the sea by a succession of gentle ridges, admitting of cultivation; and the lower parts are well watered, and very productive. With the exception of the town of Plymouth, unfavourably situated near the SW. beach, with an amphitheatre of hills in its rear, intercepting the seabreeze, the island enjoys a comparatively high character for salubrity. The government is administered by a president—subordinate to the governor-general of the Leeward Islands—who is aided by an executive council appointed by the crown. The public revenue, in 1863, amounted to 3,891*l.*, and the expenditure to 3,843*l.* The total value of the imports in 1863 was 20,089*l.*, and of the exports 15,155*l.* The island was discovered in 1493 by Columbus, who gave it its present name. It was colonised by the English in 1632. The French took it in 1668, but restored it at the peace of Utrecht.

MONZA (an. *Modatia*), a town of North Italy, prov. Milan, on the Lambro, here crossed by 3 stone bridges, 9 m. NNE. Milan. Pop. 22,106 in 1862. The town is regularly laid out, paved with round stones, and tolerably well built. It is interesting from having been the seat of government during the time of the Lombard kingdom; and the iron crown of Lombardy is kept, with other relics, in its cathedral, an edifice supposed to date from the 7th century. The former residence of the Lombard kings is said to have been the building now occupied by the court of justice. Monza has a royal palace, with fine grounds, greatly embellished by Prince Eugene Beauharnois; a gymnasium; 2 hospitals; a theatre; and manufactures of silk and cotton stuffs, shawls, hats, and leather.

MOOLTAN, or MOULTAN, a city of the Punjab, probably the *Malli* of Alexander's historians, cap. prov. of same name, on the Chinaub or Acesines, 190 m. SW. Lahore. Pop. about 60,000, one-third of whom may be Hindoos, the rest are Mohammedans. The city is upwards of 3 m. in circ., surrounded by a dilapidated wall, and overlooked on the N. by a fortress of some strength. A considerable portion of the town evidently stands on the *débris* of more ancient buildings. The houses are of burnt brick, with flat roofs; they sometimes rise to the height of 6 stories, so that the narrow streets are dark and gloomy. The fortress of Mooltan is an irregular hexagon, with a wall of burnt brick, 40 ft. high on the outside, and flanked with about 30 towers. In its interior are numerous houses, now uninhabited and falling into ruin, several mosques, and a Hindoo temple of high antiquity. Mooltan has several elegant and highly venerated tombs. Its inhabs. are principally engaged in weaving and dyeing cotton cloths, and silks of a somewhat coarser texture than those of Bahawulpoor, but which are largely exported into the adjacent countries. Many of the fabrics of Mooltan are, as of old, of a purple colour, and interwoven with gold.

This city was formerly frequented by a great number of pilgrims, and afforded immense plunder to the Mohammedans in 712. It was captured by Mahmoud, of Ghiznee, in 1010; by Mahomed Ghori, in 1176; by Timour, in 1398; and by Runjeet Singh, in 1818, since which it has belonged to the dom. of Lahore.

MOORSHEDABAD, a large city of British India, presid. and prov. Bengal, on the Bhagirathi, or most sacred branch of the Ganges, 115 m. N. Calcutta. Pop. estimated at 165,000. In point of appearance Moorshedabad cannot compare with either of the other great cities of Bengal. The houses are principally of mud and straw; the city extends for 8 m. along both banks of the river, and a number of brick or chunamed houses are interspersed among the rest, with terraces and small verandahs. A great many small mosques are scattered throughout the city; but a large and fine looking European residence, erected by the British government for the residence of the Bengal nabob, is the only public building worth notice. On the *mootie jheel*, a pool left by a former winding of the river, are the remains of the palace, built by Aliserdi Khan, in the last century, partly with materials from the ruins of Gour. Within the gateway by which the grounds are entered, is a handsome mosque of fine stone, which the zealous frequenters have concealed with thick layers of whitewash. What were formerly gardens are now mere naked fields. Only one fragment of the palace exists, but this is an elegant ruin, consisting of 4 arches supported by 5 columns, the whole of beautifully polished black marble.

Moorshedabad is considered unhealthy from the neglected state of the sewers, the closeness and filthiness of the streets, and the rank jungle intermingled with the huts and houses; and pestilential diseases have often raged here with much violence. It is the head-quarters of one of the 6 courts of circuit under the Bengal presid.; the seat of a zillah court; the residence of the district collector and other British functionaries, and of the nabob of Bengal; and has a British college, founded in 1826, and endowed with an income of 16,500 rupees a year.

Moorshedabad became the cap. of Bengal in 1704, and continued to be the seat of government till the conquest of Bengal by the British in 1756. It was then virtually superseded by Calcutta, to which the revenue-board and collector-general were transferred in 1751.

MORADABAD, a town and distr. of British India, prov. Delhi. The town, on the Ramgunga, 105 m. E. by N. Delhi, is one of the most populous and flourishing seats of commerce in the upper provs. It has some good streets, but no public edifice of any importance. The district, or collectorate, is included between the 28th and 30th degs. of N. lat., and 77° 40′ and 79° E. long. Area, 5,800 sq. m. It is well watered, and extensive tracts are very fertile, though a good deal of it be waste. Sugar, cotton, and wheat are the chief products; the latter is almost wholly exported, the food of the pop. consisting principally of jowaree and bajree. At least one-fifth part of the land is held rent-free.

MORAT (Germ. *Murten*), a small town of Switzerland, cant. Freiburg, on the SE. bank of the lake of the same name, and on the railway between Berne and Lausanne, 14 m. W. by S. the former

Digitized by Google

city. Pop. 2,266 in 1850. The town is partially walled round, and has an ancient castle, now the residence of the *oberamtmann*, a hospital, and an orphan asylum, a Protestant college, a public library, superior, inferior, and commercial schools, and a brisk transit and general trade. The circumstance of several Roman antiquities having been discovered here, has led to the supposition that Morat was anciently one of the suburbs of *Aventicum* (now Avenche). This otherwise insignificant town owes its celebrity to the great battle fought under its walls on the 22nd of June, 1476, in which the Swiss totally defeated the invading army of Charles the Bold, duke of Burgundy.

'Morat! the proud, the patriot field! where man
May gaze on ghastly trophies of the slain,
Nor blush for those who conquer'd on that plain.
Here Burgundy bequeath'd his tombless host,
A bony heap through ages to remain;
Themselves their monument.' Childe Harold.

The loss of the Burgundians was immense; as many as 15,000 soldiers having, it is said, been left on the field, exclusive of those drowned in the lake. The bones of the slain were afterwards collected, in memory of the battle, in a square building, called an ossuary. This singular monument, after standing for more than 300 years, was destroyed in 1798, by the soldiers from Burgundy, in the French army. But though nothing could surpass the gallantry and devotion displayed by the Swiss on this occasion, it is pretty certain that the defeat of Charles at Morat, as well as his previous defeat at Granson, was owing quite as much to his rashness and folly, as to the bravery of his enemies. The principal strength of the duke's army consisted in its cavalry; and yet, on both occasions, he engaged in defiles where they could not act.

MORAVIA (Germ. *Mähren*), an important prov. of the Austrian empire, which, including Austrian Silesia, incorporated with it since 1788, extends between lat. 48° 40′ and 50° 25′ N., and the 15th and 19th degs. of E. long., having N. Prussian Silesia, E. and SE. Galicia and Hungary, S. the latter country and Austria, and W. and NW. Bohemia. It is of a rhomboidal shape; greatest length about 185 m.; average breadth, 55 m. Area, 10,240 sq. m. Pop. 1,867,094 in 1857. In the N. part of the prov. is a mountainous ridge of no great elevation, stretching WNW. and ESE., between the Sudeten Bund on the W. and the Jablanka mountains, a branch of the Carpathians on the E., dividing the waters that flow N. into the Oder and the Baltic on the one hand, from those that flow S. into the Mediterranean on the other. The E. and W. frontiers of the prov. are also defended by mountain ridges. Excepting in the N., the country is mostly level, or merely undulating, with a gentle slope to the S.; nearly all its great rivers, including the Morawa, by which it is intersected from N. to S., and whence also it derives its name, the Iglawa, Thayer, &c., flowing in that direction. The Oder has its sources in the N. ridge. Being sheltered on the N., E., and W. by mountain ranges, and lying in general only from 500 to 1,000 ft. above the level of the sea, Moravia enjoys a milder climate than most countries in the same lat. The mean temperature of the year at Olmutz is about 48° Fah. The wind is mostly from the S., and the atmosphere clear. A large proportion of the soil is very fertile, and if advantageous markets could be found, large quantities of corn might be raised for exportation; but, in consequence of the want of the latter, the attention of the inhabs. has been of late devoted more to manufactures than to agriculture, and Moravia is no longer a country whence supplies of corn might be drawn, at a short notice, on a very large scale.

An estate of mean size comprises from 850 to 1,400 acres of arable land, from 140 to 420 acres of meadow land, and 1,000 to 2,500 or more of wood, according to the situation. The estates of mean size may be estimated at 2-3ds of the whole, but about 30 estates exceed 32 English sq. m. in extent. In purchasing land, a profit of from 4 to 4½ per cent. per annum is generally looked for. The size of the peasants' holdings is very various: in the plains it may be about 28 English acres; but in the hilly parts, where the pop. is thinner and the soil less productive, it is 30, 40, and in some parts 70 acres. Half holdings, quarter holdings, as well as cottiers with small gardens, are also frequent. It is supposed that of the peasant families, 2-3ds hold land, and about 1-3d may be considered as mere labourers. The mode of cultivation adopted by the peasants in the low lands consists in a rotation of three crops, viz. wheat, rye, summer corn, fallow, the fallow being only partial. In the hilly parts, the fallows are used for potatoes, turnips, and flax; in the mountains tillage is more irregular. On most of the small estates a better rotation of crops, with clover, green food, and meadows, prevails, according as the soil, or the local advantages of common grazing (which is very extensive) render it necessary. The following rotations, among others, are pursued:—1. Potatoes, with manure; 2. Barley, or oats, with clover; 3. Clover hay; 4. Clover as pasture; 5. Rye; 6. Oats. In heavy soils:—1. Winter corn with dung; 2. Barley, with clover; 3. Clover; 4. Wheat; 5. Green fodder, with manure; 6. Wheat; 7. Pease and beans; 8. Rye. In the low lands millet is a good deal cultivated; in the mountains, flax. On the estate of a Moravian nobleman, which is cultivated in a superior manner, but is by no means of a superior quality of soil, as compared with other estates in the same prov., the following is the average produce of corn per acre:—

	Maximum	Minimum	Mean
	Bushels	Bushels	Bushels
Wheat . .	42	14	24½
Rye . . .	35	10½	21
Barley . .	39	16	28
Oats . . .	46 2-3	17½	28
Potatoes .	408	175	280

Distilleries, and even breweries, are commonly established on the low farms; and, within a few years, beetroot sugar manufactories have become frequent.

Flax is cultivated in considerable quantities by the descendants of German and Bohemian settlers, in the circles of Brünn and Olmütz; it is celebrated for its fineness and length, and is second only to that of Silesia. In certain favourable situations, the soil and climate of Moravia are well adapted to the grape; and, for some time after this was ascertained, the appropriations of land to this kind of culture were so considerable, that government supposed it necessary to interfere, and to issue, in 1803, an order prohibiting the laying out of new vineyards. Wine is mostly grown in the S. circles of Znaym, Brünn, and Hradisch: the average yearly produce is estimated at 436,600 *eimers*; a good deal of which is exported to the adjacent provs. Large quantities of brandy and beer are also made. Fruits of many kinds are so plentiful, that Moravia is usually styled the orchard of Austria. The forests, formerly much diminished by imprudent waste, are now better attended to. The pasture grounds are extensive

Digitized by Google

in the mountains, and a large proportion of the Austrian heavy cavalry horses is furnished by this prov. Cattle are not very extensively bred; considerable numbers are sent thither from Poland to the markets of Olmütz, and from Hungary to those of Ausvitz. Large flocks of sheep are depastured in the mountainous districts, their numbers having increased with the increase of the woollen manufacture. The breeds have been materially improved by crossing with merinos; though, from want of proper care, the wool of Moravia is still inferior, and most part of the raw material required is imported from contiguous provs. Hogs and geese are bred in great numbers for exportation, and game is very abundant. There are valuable mines of iron, copper, lead, and coal; gold and silver mines were wrought previously to the troubles of the 15th and 16th centuries, when they were abandoned, and the works have not since been resumed. Alum, marble, and excellent building stone are found; among other minerals is a species of stone, which, when first dug up, is so soft that it may be moulded with the hand, but which hardens on exposure to the air: a great many pipe-bowls are made from it.

Manufactures and Trade.—Notwithstanding its inland position, this prov. has made a very considerable progress in manufactures, and has become, since the close of last century, one of the most thriving portions of the Austrian empire. Woollens, linens, and cottons are all made on a large scale; the first two consuming not only all the wool and flax raised in the country, but requiring a large importation from other parts. Wool is brought from Hungary; flax from Silesia and Austrian Poland; the oldest woollen manufactures are in the neighbourhood of Iglau, in the W.; but those of Brünn are now the most extensive and important. Woollens are also extensively manufactured in other towns; and, exclusive of the goods produced in manufacturing establishments, large quantities are made by the peasants and others for domestic use. Linen and thread are also largely produced; and cotton factories, some of which are on a very extensive scale, have been established, though with but indifferent success, in many parts of the prov. Dyeing, especially fine Turkey red colours, is successfully and extensively carried on at Brünn, almost all the cloth made in Moravia being sent thither for that purpose. The other manufactures, such as those of silk, leather, paper, potash, glass, and beet-root sugar are also of considerable importance; and their products are exported to the contiguous countries, and to Hungary, Austria, Italy, and the Levant. The imports consist chiefly of wool, oil, flax, raw cotton, silk, cattle, wine, and hardware. The only navigable river is the Morawa; and hitherto goods have been almost always conveyed in waggons. For these there are two great commercial roads, both leading from Vienna; the one passing by Prague, Znaym, and Iglau, in the west; the other by Brünn and Olmütz in the centre of the prov. The facilities for trade are vastly augmented by the railway from Vienna to Bochnia, in Galicia, which passes through the valley of the Morawa in this prov., having branch railways to Brünn and Olmütz.

The government of Moravia, which is entitled a marquisate, is administered by a governor with direct authority from Vienna. Like the other provs. of the empire, it has its diet; but the power or influence of this assembly is very limited. It meets annually, but has only power in local affairs, and matters concerning county taxes, their distribution and mode of collection. The prov. is subdivided into 8 districts or circles, each of which has one or two tribunals of original jurisdiction, and a high court of appeal sits in Brünn.

Education is very generally diffused in this prov., and the bulk of the people are comparatively civilised. The elementary schools are attended by about 1-8th part of the pop.: there is also a great number of superior schools, and the prov. is well provided with the higher class of seminaries. It has a university at Olmütz, attended by about 600 students: it has also faculties of science at Brünn and Nicholsburg; an academy of the provincial states at Olmütz; and schools of rural economy at Brünn and Olmütz.

For a lengthened period after their conversion to Christianity, the Moravians were divided between the Latin and Greek churches; but the doctrines of the Reformation spread widely in this prov. in the 16th century. The intolerant proceedings of the Austrian gov. obliged, however, many Protestant families to emigrate into other countries, and many others to embrace the religion of the house of Hapsburg; so that at present the Rom. Cath. faith greatly predominates over every other. There is now, however, the most perfect toleration for all sorts of creeds. The archbishopric of Olmütz is, next to the primacy of Hungary, the richest see in the empire; and the chapter of Olmütz enjoy the valuable privilege of choosing this high functionary from among their own members. The Calvinists have their superintendent at Brünn, and the Lutherans theirs at Ingrowitz. The inhab. are mostly of the Slavonian stock, divided into many different tribes; but among the pop. there are estimated to be about 450,000 Germans, residing mostly in the towns, 30,000 Jews, and a few Bohemians and Hungarians.

The territory was anciently inhabited by the Quadi and Marcomanni. These, or cognate tribes, are said, after the dissolution of the empire of Attila, to have founded a republic here which maintained a precarious independence for some centuries, and was afterwards erected into a kingdom, extending, in the 9th century, over Bohemia, Brandenburg, Silesia, and part of Hungary. Moravia subsequently belonged alternately to the Bohemians and Hungarians: it was finally annexed to Austria, together with Bohemia, in 1527. It was the great theatre of war between the French and Austro-Russian armies, in 1805.

MORAY, or ELGIN, a marit. co. of Scotland, on the S. side of the Moray Frith, being the middle district of the old prov. of Moray, having N. the Moray Frith, E. the co. Banff, S. Inverness, and W. Inverness and Nairn. It consists of a N. and principal portion, and of a smaller portion on the S., detached from the main body by the intervention of a part of Inverness; and comprises in all 531 sq. m., or 340,000 acres. With the exception of a considerable tract of low, light, arable land along the shore, the rest of the surface is rugged and mountainous. The climate on the coast district is comparatively mild for its latitude; and, for a lengthened period, wheat has been successfully raised in this district, which occasionally supplies some of the best samples to the London market. This district is also well suited for the turnip husbandry, which has been extensively introduced, and agriculture has been in other respects materially ameliorated; though, on the whole, the progress of improvement has been less rapid in this than in most districts of Scotland. Sheep-farming is not carried on upon a large scale; but the stock of cattle has been improved by crossing with the breeds of Skye and Argyle. Property mostly in large estates. Farms of all sizes; the farm buildings were formerly wretched,

Digitized by Google

but those on the principal farms have been mostly rebuilt, and are now substantial and commodious. Manufactures unimportant. Lead, iron, lime, freestone, and slate are met with; but the first two are not wrought, and of the others only the freestone to any extent. It is partly intersected and partly bounded on the E. by the Spey, and on the W. by the Findhorn, and has the Lossie in its centre. The salmon-fisheries, especially those on the Spey, are important and valuable. This co. is united with Nairn under one sheriff, and in returning 1 member to the H. of C. Registered electors for the co., 994 in 1865. The bors. of Elgin and Forres unite with other bors. in sending 2 mems. to the H. of C. It is divided into 20 pars., and in 1861 had 8,097 inhab. houses, with 42,695 inhabs. The old valued rent was 5,467*l.*, the new valuation for 1864-5 was 131,770*l.*

MORBIHAN, a marit. dép. of France, formerly a part of the prov. Brittany; between lat. 47° 15′ and 48° 15′ N., and long 2° and 3° 45′ W., having N. Côtes du Nord, E. Ille-et-Vilaine, and Loire Inférieure, W. Finisterre, and S. the Atlantic. Length, E. to W., about 70 m.; breadth varying from 30 to 45 m. Area, 679,781 hectares; pop. 486,504 in 1861. The coast-line is very irregular, presenting many inlets of the sea; from one of which a capacious bay, called by the Bretons *Morbihan*, or the 'Little Sea,' the dép. derives its name. Several islands, including Belleisle and Groix, belong to this dép. The N. and centre parts of Morbihan are hilly; but towards the S. are some tolerably extensive plains. The principal rivers are the Vilaine, with the Oust in the E., and the Blavet and Scorff in the W. Some of them are navigable for some distance, but none is of any considerable size. The canal of the Blavet, from Hennebon to Pontivy, is wholly included in this dép., and a great part of the canal from Nantes to Brest is within its limits. The climate is mild, but damp, W. winds are most prevalent. The atmosphere is cloudy, and violent storms are frequent in winter. A large proportion of the soil is stony; the vegetable mould is everywhere scanty, but towards the coast it is tolerably fertile. It is estimated that 260,971 hectares are arable, 69,052 do. in pasture, 34,462 do. in woods, and 16,880 do. in orchards and gardens; while no fewer than 291,530 do. are occupied by heaths and wastes. Agriculture is extremely backward; but more corn, principally rye, oats, and wheat is grown than is required for home consumption; and a good deal of rye-bread is made for exportation. The cultivation of the potato is on the increase. Turnips, hemp, and flax are grown; and about 700,000 hectolitres of cider are produced annually. Near Guer is the model farm of Coetbo, where 300 pupils are instructed in the details of agriculture and the auxiliary sciences at the expense of government. The rearing of cattle is an important business, and the breeds of both oxen and sheep are in the course of being improved. Butter, both fresh and salted, is an important article of commerce. The annual produce of wool is estimated at 220,000 kilogr. The horses, though small, are strong and good. Bees are very extensively reared, and 450,000 kilogr. of honey and 30,000 kilogr. of wax are annually exported, worth together about 375,000 fr. Landed property is greatly subdivided, more than one-half of the properties being assessed under 5 francs. The conger, oyster, and other fisheries are important, but especially that of pilchards, which employs in the season about 500 boats, manned by 2,500 fishermen. About 5-7ths of the fish taken are sold fresh, and the remainder, being salted, make up about 15,000 barrels. The nett produce of the pilchard fishery is estimated at 1,400,000 fr. a year. Manufactures are of considerable importance. The iron works are said to employ, directly and indirectly, from 1,500 to 2,000 workmen. The woollen cloth factories at Josselin and Malestroit employ together about 900 hands, and the tanneries are supposed to furnish products worth 800,000 fr. a year. Paper, glass wares, linen stuffs, cotton yarn, lace, hats, beer and chemical products are also produced; there are building docks at L'Orient, Vannes, Quiberon, and Port Louis; and salt is made on the coast and islands of the estimated value of 1,000,000 fr. a year. Morbihan is divided into 4 arronds.; chief towns, Vannes, the cap., L'Orient, Ploermel, and Pontivy.

MOREA (an. *Peloponnesus*), a principal div. of Greece, and the most S. portion of Continental Europe, consisting of a peninsula attached to N. Greece by the isthmus of Corinth, between lat. 36° 15′ and 38° 20′ N., and long. 21° 9′ and 23° 30′ E. Morea is said to deserve its modern name from the resemblance that it bears to a mulberry leaf; and its coast, which is deeply indented with gulfs and inlets, has numerous headlands, the chief of which are Cape Skyllo, eastwards; Capes Matapan, Gallo, and St. Angelo southward, and Cape Tornese westward. Its surface is extremely diversified, but may be generally described as a lofty table-land, traversed by a main ridge connected northward with the chain of N. Greece, and running southward to Cape Matapan, its culminating point (Mount Taygetus) rising 5,115 ft. above the sea. Three branches detach themselves from the main range; one running eastward into the peninsula of Argolis, and another, Mount Malero (an. *Parnon*), running SSE., skirting the shore of the Ægean Sea; while a third, known in different parts by the different names of Cyllene, Erymanthus, and Olenos, takes a westerly course to Cape Tornese. Many of these mountains attain a height of 4,000 ft.: their geological constitution is of limestone lying on clay-slate, interspersed in a few places by primitive rocks; and their sides are, with a few exceptions, plentifully clothed with pines, firs, oaks, and other deciduous trees. The plains are of no great extent; the largest are those of Tripolizza in Arcadia, of Nisi in Messenia, and of Gastuni in Elis. Numerous rivers and streams run from the mountain-regions in all directions; the Rouphia (*Alpheus*) is by far the largest, having a general NW. course of more than 70 miles, and, with its tributaries, the Ladon and Erymanthus, draining nearly 1-3rd of the entire peninsula. Next in size is the Gastuni (an. *Pencius*), rising on Mount Erymanthus, and flowing, as well as the last-mentioned, into the Gulf of Arcadia: the Iri (an. *Eurotas*), which is the principal river of Laconia, falls into the Gulf of Kolokythia: the other streams are mere mountain torrents, rapid in winter but dried up in summer. Embosomed in the mountains are several lakes; but none deserve any particular mention except Zaraka (the ancient *Stymphalus*) which has two remarkable *katawothra*, or subterranean caverns, to which its waters are almost confined during summer, and by which it was formerly supposed to connect itself with the little river Erasinus, falling into the Gulf of Nauphia near the Lernean Lake, now little more than a reedy marsh. (See Herod., vi. 76.) The atmosphere of the Morea is generally pure, and the climate mild, especially in spring and autumn. The heat of summer is very oppressive in the lower districts; and in winter the country is exposed to hurricanes, and liable to be inundated by heavy rains; fogs, also, are common at that season, and

Digitized by Google

the mountains are covered with snow from Dec. to the end of February. Epidemics, originating in malaria, are common diseases in summer, especially in the neighbourhood of Argos, Corinth, and the whole of the W. coast from Patras to the mouth of the Rouphia, which are the most unhealthy parts of the peninsula. The coldest, and at the same time the healthiest, region is the central table-land of Arcadia: the severity of its climate is noticed by many authors, and it probably gave to its inhab. that robust habit of body which fitted them not only for the pastoral life but for the fatigues of war, and occasioned the old proverb recorded by Athenæus, that 'a man should choose his slaves from Phrygia, but his allies from Arcadia.'

The more elevated regions are devoted to the feeding of sheep and goats, the latter being to the former as about 1 to 4. The wool is coarse; but the ewes afford good milk, butter, and cheese. These flocks suffer much from jackals and wolves, as well as from a disease called the *culoghá*, or plague. The uncultivated land serves for the pasture of cattle, which, however, are used only for draught, goat's flesh or mutton being universally preferred for food. The best breeds are said to be found in Corinth; and bulls from this district are often sent to improve the breeds in other parts of the Morea. The valleys and plains are, generally speaking, very fertile, and, with the most imperfect tillage, yield large crops. The produce of Elis comprises wheat, two kinds *holcus*, called *kalambokki*, maize, and flax. Wheat, on secondary land, is sown in Oct.; but on the richest, in Nov., Dec., and even so late as Jan.: harvest, on the plains, begins early in June, and is not entirely over till the middle of Aug. The kalambokki is sown in April, and gathered in Sept. Along the N. coast large quantities of the currant grape are raised, and the average yearly production of currants, in the neighbourhood of Patras, is stated to amount to 5,000,000 lbs., or about one half of that raised in Zante. Argolis produces extensive crops of rice and cotton, the former being a considerable article of trade between Nauplia and Constantinople. Cotton is likewise raised in Messenia and Laconia, and olive oil, highly esteemed all over Greece. Corn is raised in the irrigated parts of Arcadia, but the greater part of that central district is employed for pasturage. Agriculture, owing to the long-continued insecurity of property, the oppressions under which the peasantry have laboured, and to the obstinate adherence of the farmers to old and imperfect methods of husbandry, is in a most degraded state. However, there has been a marked improvement in the condition of the rural population within the last few years. Land used formerly to be let on the métayer system; the proprietor being at all expenses, and receiving two-thirds of the crop, clear of tax; but, since Greece has been separated from Turkey, nearly nine-tenths of the land has fallen into the hands of government, which offers it for tillage to any one who will agree to pay a quarter part of the produce for rent: the remaining tenth part of the land belongs to individuals, chiefly small proprietors, and is charged with a tax of one-tenth of its produce, and the additional burden of obliging the labouring peasant to bring his tithe in kind from a great distance to the town in which it is collected. The flora and fauna of the peninsula differ in few respects from those of N. Greece.

The manufactures of the Morea are unimportant in amount, but comprise coarse cotton and woollen goods, silk fabrics, leather, and salt. The export trade consists chiefly of wine, oil, currants, rice, fruit, and wool; its chief ports being Nauplia, Patras, Corinth, and Navarin. The Morea, which under the Turks was divided into the 2 sandjaks of Tripolizza and Mistra, is now distributed into the 5 nomes of Argolis and Corinth, Achaia and Elis, Arcadia, Messenia, and Laconia, these being again subdivided into 35 eparchies. Tripolizza was the cap. under the Turks, but recently it has greatly decayed, and Nauplia is the modern cap. The other principal towns are Patras, Modon, Corinth, and Koron.

The most interesting features of the Morea, to the classical traveller, are the remains of many ancient cities, existing in the palmy days of Grecian glory. Among the principal are three mentioned by Homer (Il., iv. 51.) Sparta is to be traced only in its ruins; but the beauty of its position, on five hills close to the Eurotas, still recalls the 'pleasant Lacedæmon.' Various remains of ancient architecture, in the form of dilapidated walls, temples, and forts, exist in different parts of the country, and are described by the general name of *Palaio-Castro*. Of the Cyclopean, or primitive mode of building with uncemented blocks of stone, the chief relics are at Mycenæ and Tyrins. At Mantinea the circuit of the walls is still visible; and the outlines of the celebrated field of battle may be traced. The scene of the Olympic games, though not ascertained with complete certainty, was near the influx of the small river Cladeus into the Alpheus. These interesting ruins are described at some length under their respective heads, to which readers are referred for further information.

The Peloponnesus, which, before it received that name, was called successively Apia and Argos, received its appellation from the Phrygian Pelops, whose descendants were afterwards expelled by the Heraclidæ. Its ancient history forms a part of that of Greece generally. After the destruction of the Achæan league by the Romans, *anno* 146 B.C., it was formed, with the rest of Greece, into the Roman prov. of Achaia; and continued, either really or nominally, a portion of that empire during 1,350 years. It was taken from the Byzantine emperors by the Franks at the beginning of the 13th century; and, in the division of the conquered lands, the larger part of the Peloponnesus fell to the Venetians, from whom it received its modern name, either from its supposed resemblance in shape to the leaf of the mulberry (It. *more*), or from the abundance of that fruit in the peninsula. It was repeatedly invaded by the Turks in the 15th, 16th, and 17th centuries, and was finally confirmed to them in 1718, by the treaty of Passarowitz. With the exception of Maina, the Morea, with the rest of Greece, remained under their despotic sway till 1821, when its inhabitants joined in the general struggle for that independence, which at length, after eight years of anarchy and bloodshed, was established by the treaty of Adrianople in 1829.

MORLAIX, an ancient town and sea-port of France, dép. Finisterre, 33 m. ENE. Brest, and 283 m. W. by S. Paris, on the railway from Paris to Brest. Pop. 14,008 in 1861. The town is situated at the foot of two hills, and at the confluence of two small rivers, forming a considerable æstuary and commodious harbour for vessels of 400 tons burden. At the bottom of the harbour stands a well-fortified castle; and hills covered with gardens, formed into terraces, rise immediately above the town, the principal street of which runs parallel with the quays. The principal square (built on arches over the river) comprises many good modern houses, with a very large town-hall, portioned out into government-offices, and a public library. There are two large

Digitized by Google

churches, one an elegant Gothic structure, with a fine tower. A tobacco manufactory of modern construction, employing between 300 and 400 workmen, a hospital, school of navigation, theatre, and two hotels, are the other chief buildings. Morlaix is the seat of a subprefect, of a tribunal of primary jurisdiction on commerce, and of a society of agriculture: its principal manufactures are those of tobacco and linen cloth; and it enjoys a considerable trade in butter, corn, tallow, honey, and wax.

Morlaix lays claim to considerable antiquity, and was already an important town when taken by the English, near the close of the fourteenth century. During the two succeeding centuries it suffered greatly from the ravages of civil war.

MOROCCO (EMPIRE OF), (Arab. *Moghrib-ul-Acsa*, 'the extreme West,') a tract of country in the NW. of Africa, between the 28th and 36th degs. of N. lat., and the 2nd and 12th degs. of W. long., comprising the *Mauritania Tingitana* of the ancients. It is bounded N. by the Mediterranean Sea and the Straits of Gibraltar, E. by the Atlas range, which separates it from the Algerine territory and Biled-ul-Jerid, S. by the river Akassa, and Sahara desert, and W. by the Atlantic ocean. Length of coast-line along the Mediterranean, 250 m.; ditto along the Atlantic ocean, 600 m.; estimated area, 219,300 sq. m., distributed into four kingdoms, the area and pop. of which are estimated as under:—

Kingdoms	Provinces	Area in Sq. Miles	Population	Chief Towns
Fez . .	7	88,657	3,200,000	Fez, Tangier, Mequinez
Morocco	7	51,380	3,600,000	Morocco, Mogador
Suse . .	2	28,656	700,000	Agadir
Tafilet .	..	50,697	1,000,000	
Total of Empire		219,390	8,500,000	

Of the above population it is estimated that 3,550,000 are Moors, 3,750,000 Berebers, and Shellochs (chiefly devoted to agricultural and pastoral pursuits), 740,000 Bedouin Arabs, 339,500 Jews, 120,000 negroes, and 500 Christians and renegades.

Surface.—Morocco is mostly bounded on the E. by the stupendous chain of the high Atlas, which commences with Mount Bemi-Ammer, S. of the desert of Angad, on the Algerine frontier, and extends S. as far as Capes Geer and Nun. The most elevated parts of the range occur between 30° and 33° lat.; the highest point, Mount Hentet, is about 13,000 ft. above the level of the sea. A subordinate range, sometimes called the little Atlas, branches NNW. and NW. towards Ceuta and C. Spartel; and other chains, either continuous or detached, are thinly sprinkled over the country S. of Fez and Mequinez. The geological constitution of these mountains is granitic in the central ridges, on which are superimposed secondary and even tertiary formations in the less elevated parts of the chain. Silver, iron, and lead mines are wrought to some little extent. Mineral salt is found in great abundance throughout Morocco, and is a considerable article of export to Soudan. But notwithstanding the gigantic mountains by which it is in part bounded and in part overspread, Morocco has a large extent of comparatively level land. Some of the plains and valleys are of great extent and extraordinary fertility, especially those of Shawiya, Temsena, Ducilla, and Terara between Fez and Morocco. The principal rivers are, 1. the Sebu, rising by several sources on the W. side of the Atlas range, falling into the Atlantic close to Mehedia, having a probable length of 260 m.; 2. the Wad-Oom-er-Beg, rising by two principal branches in the high Atlas, and flowing W. and WNW. to its mouth at Azamor, after a course of about 300 m.; and 3. the Wad-Tensift, rising about 40 m. E. of Morocco, takes a general course W. by N. to lat. 32° 7′ N., and long. 9° 19′ W., where it falls into the Atlantic ocean. The climate of the country is healthy and genial; the heat is less intense than might be expected from its geographical position, and epidemics are of rare occurrence. The thermometer, even in the hottest season, except during the occasional prevalence of hot winds from the desert, seldom exceeds 28° Reaum. (94° Fahr.); the barometer averages throughout the year 28·30 inches; and the annual fall of rain (chiefly confined to October and November), as calculated on a series of years, amounts to 29 inches. These observations, however, apply chiefly to the N. and W. portions of the empire, or E. of the Atlas range, the heat is intense, and rain seldom falls. The soil is now, as in antiquity, proverbial for its fertility. Mela says of it, '*Ceterum solo etiam ditior et adeo fertilis est, ut frugum genera non cum serantur modo benignissimè procreet; sed quædam profundat etiam non sata.*' (Lib. iii. cap. 10.) In some favoured spots three crops of corn are reaped in the same year: the soil in many parts is purely alluvial, and in others of clay, sand, and loam, mingled in the most advantageous proportions.

Agriculture, owing, perhaps, to the extreme fertility of the land, which produces luxuriant crops with little care or attention, is in the most backward state: fallows and rotations of crops are wholly unknown. The system of culture has remained almost unchanged since the invasion of the Arabs in the eleventh century; and it consists of little more, generally speaking, than grubbing up and burning the weeds before the autumnal rains, and afterwards ploughing the land about 6 inches deep with a machine of the most simple description, drawn by a heifer or ass, and in the S. provinces by a camel. Except in the gardens, the Moors never think of using manure or other means of assisting the soil, and consequently, the land near the towns is more impoverished than in less populous districts, where, from the abundance of unemployed land, it is allowed to remain in fallow two or three years, and in the meantime other parts are brought under the plough. The wheat is white, transparent, almost without husk, having a large and exceedingly hard grain, producing a flour superior in fineness and colour to that of the northern countries. A second crop is rarely obtained; but in the S. provs., when the harvest commences very early, a spontaneous crop springs up. According to Major Beauclerk, 'The plains of Duquella alone are capable of producing in one year as much corn as the united kingdoms of Great Britain. Immense crops of corn yearly overstock the market of Mogador: a bushel of corn may be procured for a partridge, or a coin worth an English shilling; and such is the profusion of grain, that, in many instances, it does not repay the labour of harvesting.' (Journey to Morocco, p. 286.) Yet, with all this productiveness, so little industry and providence are exercised, that the inhabitants are sometimes, in bad seasons, reduced to the greatest privations, and hundreds of Berbers often die of famine.

Barley is used chiefly for horses and cattle, oats not being raised in any part of the country. Maize and Turkish millet are raised near the towns and along the coast in the S. provs., and potatoes near Tangiers. On the whole, however, not more than a third part of the arable land is cultivated, and

Digitized by Google

this in so superficial a manner, that the produce might be trebled, or even quadrupled, by a better system of tillage. Holme-oaks, cork and juniper trees are found on the mountains; and immense quantities of date-palms, vines, olive-trees, sugar-canes, cotton, tobacco, and the fruits of S. Europe are found in the level country. Throughout Morocco, however, there is a general scarcity of building timber; the white cedar grows to a tolerable size in the prov. of Refé; but, when large timber is wanted, it is usually imported from Gibraltar. Land is usually rented by the number of oxen required for its cultivation, at the rate of about 7 dollars for the yoke of oxen; but in lands belonging to the sultan, and allotted out to his soldiery, the same portion of land would be rented at about 4 dollars a year, and, if sold by auction, would fetch at Tetuan about 200 dollars. (Sir A. C. Broke, Spain and Morocco, i. 400.) The pasture-grounds, also, are extremely rich, the grass often attaining a height unequalled except in the prairies of America. The horses in the country are estimated at 400,000, but the breed once so esteemed under the name of Barbs is greatly deteriorated. A few milk-white, small, and finely-proportioned horses, with black manes and tails, are occasionally to be met with, belonging to the Arab chiefs; but the mass, though active, hardy, and with good action, are poor and meagre looking: their exportation is entirely forbidden. Mules (of which there are upwards of 1,000,000) are equally well adapted for riding and draught: they are almost universally employed in long journeys, and a good mule, especially if of a bright chestnut colour with a black cross, is valued higher than a horse. Neither the asses nor mules, however, are at all comparable to those of Andalusia. The wool of the sheep is of the finest quality, and the hides of the goats furnish the celebrated Morocco leather. Oxen and camels are bred in great quantities. A duty of about 16 dollars a head is imposed on the exportation of cattle, which being tantamount to a prohibition, the farmer is discouraged from taking any pains further than to supply his own or his neighbours' wants. The wild animals comprise dogs, hyenas, lions, ounces, panthers, lynxes, gazelles, boars, and different varieties of game; the principal birds being ostriches, storks, quails, snipes, and ducks. Fish of many varieties are found in most of the rivers; bees, wasps, and mosquitoes swarm throughout the country; and locusts of large size commit fearful ravages, occasionally devouring every green leaf, and leaving the ground over which they have passed absolutely barren.

Manufactures and Trade are confined within very narrow limits. Except in the principal towns, where the houses are large and square, with a central court and flat roof similar to those of Algiers, the people live almost universally in huts or movable tents; comparatively destitute of furniture and accommodation. Every woman understands the art of spinning wool or cotton, and the men weave it into cloth. Domestic labour, in short, which is almost wholly performed by women, supplies the principal wants of the inhabs. Tanning appears to be almost the only exception: leather is made in great quantities all over the empire, but especially in the large towns, that of Fez being red, while that of Tafilet and Morocco is respectively green and yellow. About 250,000 dozens of goat-skins are annually exported. The red caps, silk fabrics and girdles of Fez are highly esteemed: carpets, chip-baskets, and earthenware are manufactured in different provs., and in the principal towns may be found skilful saddlers, carpenters, locksmiths, and farriers.

The *commerce* of Morocco is carried on, first, with Europe; second, with the Levant; and, third, with the interior of Africa. The exports to Europe comprise wax (chiefly to Marseilles, Leghorn, Cadiz, and Lisbon), cow-hides, goat-skins, olive-oil, and gums, with smaller quantities of wool, dates, honey, indigo, shawls, and carpets; while the imports are chiefly of manufactured and colonial goods. The subjoined tabular statement shows the commerce—according to returns by Mr. Reade, British consul—at the various ports of Morocco, in the year 1863:—

Ports	Entered in 1863		
	Vessels	Tons	Value of Cargoes
			£
Tangier . . .	466	51,194	365,686
Tetuan . . .	231	2,178	39,184
Laraiche . . .	78	3,528	10,885
Rabat	44	3,662	115,806
Dar-al-baida . .	127	25,705	32,251
Mazagan . . .	140	21,540	120,241
Saffi	75	10,200	30,794
Mogador . . .	100	23,576	309,324
Total . .	1,261	141,583	1,024,171

Ports	Cleared in 1863		
	Vessels	Tons	Value of Cargoes
			£
Tangier . . .	454	41,282	221,561
Tetuan . . .	229	2,112	20,798
Laraiche . . .	80	3,557	28,741
Rabat	41	3,508	74,838
Dar-al-baida . .	133	25,705	88,322
Mazagan . . .	133	20,044	128,140
Saffi	73	10,035	50,196
Mogador . . .	91	20,641	355,088
Total . .	1,234	126,884	967,683

The trade with the Levant is carried on partly by pedlers, accompanying the pilgram caravan to Mecca, and partly, also, by feluccas coasting the shores of Africa as far as Alexandria. The communication with the interior of Africa is effected by caravans proceeding from Tafilet, and crossing the Sahara desert to Timbuctoo, in the manner described in the art. AFRICA, where the traders exchange salt, tobacco, cloth, caps, girdles, and Turkish daggers, for gold-dust, ivory, rhinoceros horns, assafœtida, ostrich feathers, and slaves. Interest on money is forbidden by law; but, notwithstanding, the Jews and others exact sums varying from 7 to 12 per cent. a month, on the security of merchandise. Paper money and bills of exchange are wholly unknown; nor is there any communication by post, for the purpose of facilitating commercial intercourse.

Government.—The government of Morocco is a pure despotism, the sultan being the head both of church and state, and the arbiter over the property and lives of his subjects; his chief title is *Emir-al-Mumenin*, 'absolute ruler of the true believers.' There are not here, as in Turkey, an ulema, the depositary of the national religion, or a mufti, the head of the law, who possess privileges independent of the sovereign, and may interfere to check his determinations. There is not even a council or divan which he is expected to consult. He has no regular ministers: all is done by his single command, and no subject is supposed to have either life or property but at his disposal. The sultans would appear to consider an adherence

Digitized by Google

to their engagements as an unconstitutional check on their power. 'Takest thou me for an infidel,' said one of them to a foreigner, 'that I must be the slave of my word? Is it not in my power to say and unsay whenever I shall please?' (Chenier's Morocco, i. 208; Eng. trans.) But, after all, there are here, as in all countries, certain rights which the monarchs dare not touch, and certain duties they must discharge. The sultan cannot safely invade the domestic privacy of his subjects, nor shock any of those customs to which long establishment has given the force of law. He is expected also to give public audience four times a week, when he administers justice to all, even the poorest. Yet prudent persons usually think it more eligible to acquiesce in the sentence of the cadi, than to afford to the sultan any insight into their private affairs, of which he might afterwards make a not very agreeable use. On these occasions the sovereign appears on horseback, with an umbrella held over his head.

The crown is hereditary, descending to males only, but without the right of primogeniture; and hence it is not unusual for strife and civil war to arise among the children of a deceased sultan. The government has frequently, also, been overthrown by private or public treason. And hence, probably, has arisen the jealous and ferocious character by which the rulers of Morocco have been especially distinguished. Muley Ishmael, who ascended the throne in 1672, a bloodthirsty monster, though not without ability, introduced the system, since kept up, of employing a guard of negro mercenaries, on whose fidelity more reliance may be placed than on that of the Moors.

The most important state officers are the *Mula-et-tei*, or tea-taster, usually the sultan's favourite, and the *Mula-et-tesserâd*, or steward of the sultan's household. The Koran is here, as elsewhere in the Mohammedan world, the text-book of justice, and decrees are usually executed immediately after they have been pronounced. For the purposes of civil and military government, Morocco is divided into twenty-eight prefectures, some of which extend over large tracts of country, though others are confined to a single town. The chief provincial officers are the kaïds or prefects, who, although removable by the sultan, are despotic governors and commanders of the military forces within their districts. The agricultural tribes have also their respective sheiks; but these are commonly subject to the Moorish governors. The regular army does not exceed 16,000 men; of whom fully a half are negroes. The sultan's bodyguard comprises about 3,000 infantry and 2,000 cavalry. The Moors are good horsemen, and endure hunger, thirst, fatigue, and every inconvenience. They might, therefore, make excellent soldiers if they were properly manœuvred and exercised; but they are ignorant of every part of discipline, except submission to their superiors. Their standard is the commentary upon the Koran, by Sidi Beccari, the favourite imperial saint, whose book is deposited under a tent in the centre of the army, and is the signal by which they rally. Morocco has 24 fortified and garrisoned towns, the principal of which are Suira, Tangier, Azamer, Salee, and Mazegan. The navy of the empire is quite inconsiderable.

Population.—The inhab. may be divided into the classes of Moors, Arabs, Berbers or Berebers, Shellochs, Jews, and Negroes. The Moors are a mixed race, the descendants of the ancient Mauritanians, intermixed with their Arab conquerors, and with the remains of the Vandals, who once ruled over the country; and, with the Moors, expelled from Spain, in the 15th century; but these varieties have been long since obliterated, and the Moors are now moulded into a distinct, peculiar people. They principally inhabit the villages and cities. Their language, called the Occidental Arabic, contains, as might be expected, many words borrowed from the language of the Berebers and Shellochs, and imported from Spain. The Arabs, as distinguished from the Moors, principally inhabit the plains, where, like their ancestors, they mostly lead a wandering life, and follow pastoral pursuits. They occupy *durwars*, or movable villages, composed of tents; and whenever the pastures in the vicinity are exhausted, or the increase of fleas and vermin render the tents uninhabitable, they are struck; and placing them, their effects, and children, on panniers on the backs of camels, they set out in search of some other quarter in which to settle. Their women are not confined; but being subjected to hard labour, tanned by the sun, and sometimes even yoked in the plough with domestic animals, these habits of hardihood, with the loss of all traces of beauty, prove more effectual securities against intrigues than the bolts and bars used in the cities. The mountainous portion of the country is occupied by the Berebers and Shellochs, probably the aboriginal inhabitants of the country. The Berebers, who principally inhabit the country of the lesser Atlas, adjoining the Mediterranean, are nearly white, well formed, of middle size, and athletic; they live mostly in huts of stone and mud, but sometimes, like the Arabs, in tents, and sometimes in caves; they are principally engaged in hunting and pastoral occupations. The Shellochs, who inhabit both sides of the greater Atlas, are less robust than the Berebers, but they are more advanced in civilisation, being principally agriculturists and artisans, and occupying comparatively good houses. A great discrepancy of opinion has been entertained as to whether the languages of those people be radically different, or merely different dialects of the same language; the latter opinion, though accompanied by several difficulties, seems to be, on the whole, the most probable.

The Berebers and Shellochs are sometimes called *amazerghis*, or freemen, a designation to which they have a not ill-founded claim. They have never, in fact, been fully subjected to the Moorish government; they often break out into rebellion, and have carried their arms to the gates of Morocco. Their internal government has even somewhat of a republican form, and they are well trained to the use of arms. The Jews, who are numerous, particularly in the cities, carry on all the mercantile and money transactions; they also act as interpreters, and perform, in the cities, the functions of servants, porters, and scavengers. Every species of oppression and contempt, however, is heaped upon them. They are not allowed to mount on horseback, nor to sit before a Moor with their legs crossed. The meanest Moors may insult or maltreat them in the streets, or enter their synagogues for the purpose. They must not read or write Arabic, which, being the language of the Koran, is too holy for them. A worse evil is, that when the emperor, or men in power, happen to be in want of money, they hesitate not to relieve themselves by stripping the Jews of large portions of their wealth, however carefully it may be concealed. The negroes, who are not very numerous, are imported from Soudan. Sometimes, however, they obtain their liberty; and, as already stated, the emperor has thought fit to select them for his bodyguard.

Religion and Education.—The prevailing *religion* is Mohammedanism, and nowhere are its tenets and observances more rightly enforced.

Digitized by Google

The Jews are universally despised, nor are Christians allowed to reside any where except in Tangiers, Mogadore, El-Araitch, and Tetuan. There is a Franciscan convent in Tangiers, being the only Christian establishment throughout Morocco.

The *education* of the Moors is, at present, greatly inferior to that of their forefathers in the Middle Ages, and is almost exclusively confined to learning the Koran by rote, reading, and writing. At the high school of Fez, however, more aspiring students may receive a sort of instruction in grammar, geometry, and the mixed sciences, logic, rhetoric, medicine, and theology. The art of printing is unknown, so that great numbers of persons are employed, in all parts of the empire, copying the Koran. Arts and sciences are in the most barbarous state; the literature and history of foreign countries are wholly unknown; and their only musical instruments are a rude pipe, and more barbarous drum.

Manners and Customs.—The Moors are generally a fine-looking race of men, of middle stature, and somewhat inclining to corpulence, owing, probably, to their inactive life. The women are pretty when young, blacken their eye-lashes and eye-brows, and stain the tips of their fingers with *'henna.* The dress of the country is picturesque and graceful, comprising a shirt with large sleeves, ample drawers of white linen, a *kaftan*, or waistcoat, of yellow or blue cloth, a silk sash, *haick*, or mantle, and slippers, or boots, of *yellow* leather. Women, however, wear *red* shoes. The Jews are not allowed to wear colours, and a black cap, with slippers of the same colour, marks their degradation. The usual food throughout the country is a dish, called *kuscasú*, composed of mutton or fowls, stewed with vegetables, and served up in large earthenware pans, accompanied with a savory kind of sauce. Coffee is not used; but tea is a general beverage, always presented to visitors, and highly esteemed by all classes. The Moors do not smoke tobacco, but take large quantities of snuff, and occasionally smoke the hemp-plant, which seems to partake of the intoxicating qualities of opium: a confection is also made from the hemp-seed, possessed of the same qualities, and to the use of this the natives are much addicted. The distinguishing features of the Moorish character are, a love of idleness, apathy, pride, ignorance, bigotry, and the grossest sensuality. The cities present the same gloomy aspect as in other Moorish states—that of strict seclusion, particularly of the female sex, while habits of gravity and silence prevail among the men, who meet only in the public coffee-houses. Unluckily, their high national pride, and contempt for all other people, is not combined with any sentiments of individual honour. They are not, however, wholly destitute of good qualities, among which may be mentioned their hospitality, and fortitude under misfortune: *Allah-lrá*, 'God willed it,' is their consolation in trouble. They are, also, healthy and long-lived, which could hardly have been expected, considering their habits. The climate is unquestionably good; but leprosy, ophthalmia, hydrocele, and syphilis, originating, most probably, in filthy habits, are not uncommon. Their medicines consist only of a few herbs, and their surgery is such as might be expected among a people without science or arts. The plague visits them about once in 20 years, and carries off thousands of the population.

History.—Morocco, anciently called Mauritania, was inhabited, under the Romans, by a hardy nomadic race, who were never thoroughly subdued by that nation. Early in the 7th century, the country yielded to the Saracens, whose different dynasties disputed for its possession nearly 300 years. At length, in the 11th century, a chief of Leptuma, having acquired so high a reputation for sanctity as to cause all the neighbouring tribes to flock to his standard, overturned the existing government, and extended his dominion all over N. Africa. His son, Joseph Ben-Tessisin, extended the empire by the addition of Fez and the S. provs. of Spain. In 1148, however, another revolution took place, and the Morabites were succeeded by the Almohades, who, in their turn, yielded the empire to more successful adventurers. In this state of anarchy the country remained till the middle of the 16th century, when Mohammed-Ben-Achmet, a scheriff and descendant of the Prophet, ascended the throne, which his posterity has ever since continued to occupy.

Morocco (Arab. *Marak'sh*), a large city of NW. Africa, and the cap. of the above empire, 105 m. E. by N. Mogador, lat. 31° 37′ 20″ N. long. 7° 36′ W. Pop. estimated at 80,000 in 1862. The city is beautifully situated about 4 m. S. from the river Tensift, on a plain elevated 1,450 ft. above the sea, and is surrounded by a strong wall of lime and mud 30 ft. high and 6 m. in circuit, with square turrets at intervals of 50 paces; but the enclosed area, as in many African and Asiatic cities, comprises, besides houses and streets, many large gardens and open spaces from 20 to 30 acres in extent. The whole town, with slight exceptions, is in bad repair, many parts are in ruins, and it is everywhere filthy in the extreme. It is entered by 11 strong double gates: but the only one worth notice is the *Beb-el-Rom*, a Moorish horse-shoe arch, richly sculptured with arabesque work. Extensive under-ground aqueducts, 10 or 12 ft. deep, surround the walls, and reach across the plain to the foot of Atlas; at present, however, they are mostly in ruins. The houses in the habitable part of the town, a few of which are of stone, but the greater number of mud and lime, are, generally speaking, small, and only one story high, with central courts and flat roofs, the sides fronting the streets being plain and whitewashed, with here and there a narrow opening, unglazed, and scarcely deserving the name of a window. Their interior disposition greatly resembles that of Spanish houses—the doors are of carved cypress wood, the rooms long and narrow, with scarcely any furniture except a few mats, carpets, and cushions. Most of them, however, being old and in decay, swarm with vermin, especially bugs, scorpions, and snakes. The streets, which are unpaved, are frequently so narrow and crooked, that a horse can with difficulty pass through them; and they are in parts so heaved up with accumulations of filth, that the floors of the houses are some feet below the pathway. These inconveniences are further increased by numerous low cross arches and gateways that connect the opposite houses. The city contains several public squares; but, like the streets, they are unpaved, and consequently very dirty when it rains, and covered with dust in dry weather. The sultan's palace stands on the S. side of the city, outside the main wall, but is itself enclosed within walls of equal strength. Its precincts consist of a large oblong space about 1,500 yds. in length, and 600 in width, divided into squares and laid out in gardens, round which are several detached pavilions about 40 ft. square, forming the imperial residence. These have pyramidal roofs covered with glazed tiles, and lighted from 4 lofty and spacious doors, which are opened according to the position of the sun, the floors being tessellated with

Digitized by Google

variously coloured tiles, and the interior painted in the arabesque style, and ornamented with square compartments containing passages from the Koran, written in a sort of Arabic short-hand. The luxury and convenience of tables, chairs, and curtains are unknown, and even the rooms occupied by the sultan are furnished only with a few mats, carpets, cushions, some china and tea equipage, a clock, and arms hung round the walls. The grand pavilion in the middle of the gardens is appropriated to the women: it is a spacious building fitted up in the same simple style as the rest. Near the palace, on the E. side of the enclosure, is the *m'shoar*, or place of audience, an extensive quadrangle, walled in, but open to the sky, in which the sultan gives audience to his subjects, hears their complaints, and administers justice. Attached to the palace, also, are 3 gardens, each about 15 acres in extent. In two of these the foreign merchants are allowed to pitch their tents when they visit the sultan; and the third, called *Jenán el Afia*, 'the Garden of Prosperity,' is destined for the use of the sultanas. The city has many sanctuaries and mosques; one of these, called El Kontabiá, is conspicuous above all by a square tower, 221 ft. high, divided into 7 stories, and surmounted by a small lantern. The mosque Beni-Yusef, next in height and age, has an attached college and a saint's tomb, with a cupola delicately wrought in Saracenic tracery. El Moazin, also, said to be the most ancient mosque in the city, is of great size, comprising several courts opening into each other, and intersected in various directions by highly sculptured horse-shoe arches. Its gates are said to be those of Seville, brought thence by the triumphant Al-Manzor. The mosque of Bel-Abbas, the patron-saint of Morocco, is built in the shape of a pavilion, surmounted by a cupola covered with green varnished tiles. Attached to it is an immense hospital, said to have accommodation for 1,500 patients. Near the S. wall of the city is the *Madrese del Emshia*, a college and mosque, in which are the sepulchres of the sultans of the Moluc Saidia dynasty, once adorned with statues and busts, now defaced.

Morocco, like most other Moorish towns, comprises numerous fountains, several of which have traces of delicate sculpture; and one, close to the mosque El-Moazin, has a cornice of white marble, still exhibiting the remains of former beauty. Outside the walls are several large cemeteries, one of which, on the E. side, is upwards of 100 acres in extent: war, plague and famine, to which the town owes its present decay, have caused them to be thickly tenanted. In the N. part of the town is the *Kaissaria*, or bazaar, a long range of shops, or rather stalls, covered in from the weather, divided into compartments, and serving as a general lounge for all classes of the inhabs. Here are exposed for sale silk scarfs, shawls, and handkerchiefs from Fez; carpets and various articles of dress from Duquella; cloth, linen, hardware, tea and sugar from England; almonds and raisins, henna, and pure spirit from Suse; corn and beans from Shragna; dates from Tafilet; and an abundance of boots, slippers, saddles, earthenware, mats, and cord, with gold and silver embroidery, in making which the inhabs. particularly excel. A large market is held every Thursday, near the N. gate of the city, and is well supplied with home-manufactures: outside the gate, also, is the market for camels, horses, mules, horned-cattle and sheep, but the display is very indifferent. The tanning of leather is the most important branch of industry in Morocco.

The *Millah*, or Jews' quarter, is a walled inclosure about 1½ m. in circuit, at the SE. angle of the city, very densely peopled, and dirtier even than the parts inhabited by the Moors. The Jews pay a capitation-tax to the sultan, and are treated with the utmost contempt; but they are a serviceable body, and are the only goldsmiths, tinmen, and tailors in Morocco. Shoemaking, carpentry, masonry, smith's-work, and the weaving of haiks are exclusively the occupation of the Moors. Provisions are cheaper even than at Tangiers; but there is very little trade, that which exists being, with the exception of the commerce in leather and salt, confined to the supply of the town. The air about Morocco is generally calm; the neighbouring mountains defend it from the scorching winds that blow from Tafilet and Sahara, while the snow with which the chain is covered nearly all the year, imparts an agreeable coolness to the surrounding atmosphere. In summer, however, the heat during the day is intense, though the nights are cool, and in winter the cold is severe. On the whole, however, the climate is extremely healthy.

Morocco, which is supposed to be situated on or near the spot occupied by the ancient *Bocanum Hemerum*, was founded in 1052 by Abu Tessisin, the first Moorish sultan of the Marabou dynasty, and in the following century, during the reign of Ali Ben Yusef, it is said, but no doubt the statement is grossly exaggerated, to have contained 1,000,000 of inhabs. In later times its population has greatly fallen off; and, owing to the devastations of successive conquerors, it retains little of its ancient magnificence. At present it is in many parts little else than a desert; the ruins of houses heaped one upon another serve to harbour thieves and desperadoes of all sorts. Nothing but the wretched government of Morocco could have made so great a city so miserable and so deserted.

MORON, a town of Spain, in Andalusia, prov. Seville, on a plain near the foot of a lofty hill, 33 m. SE. Seville, and 60 m. WSW. Cordova. Pop. 12,846 in 1857. The town has some well-built houses, a par. church, and 2 hospitals. Its inhab. are almost wholly agricultural, and nearly all the oil used in Seville is raised in the neighbourhood. The existence of Roman inscriptions and other antiquities has induced some authors to identify Moron with the ancient *Arunci*.

MORPETH, a mun. and parl. bor., market town and par. of England, co. Northumberland, ward of its own name, on the N. bank of the Wansbeck, 14½ m. N. by W. Newcastle, and 292 m. NNW. London by Great Northern railway. Pop. of munic. bor. 4,296, and pop. of parl. bor. (which includes the par. of Morpeth, except one detached township, together with the par. of Bedlington), 13,794 in 1861. The town, which is pretty well built, though badly paved, consists principally of two streets, at the junction of which is the market-place, with a high square clock-tower, containing a chime of bells. A town-house, a stone structure fronted by a colonnade, and decorated with turrets at the angles, was erected in 1714, at the expense of Lord Carlisle, for the manorial courts, quarter sessions, and local business. The co. gaol and house of correction is an extensive and commodious pile erected in 1829 on the S. side of the river. The par. church, a plain brick building, is on Kirkshill, ¼ m. S. the town, the living being a rectory in the gift of Earl Carlisle. There is also a chapel of ease. The Rom. Catholics, Presbyterians, and Wesleyan Methodists, have their respective places of worship, to which, and the church, are attached Sunday-schools. A grammar-school was founded here by Edward VI.; it was rebuilt in 1858. An English free-school and infant schools are supported by the corporation,

Digitized by Google

and there are 2 subscription schools for boys and girls. The other establishments of the town comprise a provident club, dispensary, mechanics' institute, subscription library, and some minor charities.

Morpeth is a bor. by prescription, and recognised as such by the charter of 15 Charles II.; its municipal officers, since the Mun. Reform Act, being a mayor, 3 aldermen, and 12 councillors. It has sent 2 mems. to the H. of C. since the reign of Mary; the right of election, down to the Reform Act, having been nominally vested in the bailiff and free burgesses, but substantially in the Earl of Carlisle, lord of the manor. This act deprived it of one of its members, and the limits of the bor. were then also enlarged, as stated above. Reg. electors, 446 in 1865. Petty sessions are held weekly, and quarter sessions alternately, with three other towns. Large cattle fairs, the Wed., Thurs., and Friday but one before Whit-Sunday. Races are held on Cottingwood Common, early in September.

It appears from Camden that Morpeth was 'burned down by its inhabitants in 1215, out of hatred to King John,' that is, with the view of distressing him when on his march to punish the revolt of his barons; and it suffered again from fire in 1689. Its castle, built in 1358, and Cistercian monastery, both mere ruins, and several churches and baronial residences in the immediate vicinity, are well worth the notice of the antiquary.

MOSCOW (Russ. *Moskva*), a large city of European Russia, long the residence of the sovereigns, and still one of the capitals of the empire, on the navigable river Moskva, 400 m. SE. Petersburg, on the junction of the railways from St. Petersburg to Orel and to Nijni Novogorod. Pop. 386,370 in 1860. The city, which was founded in 1147, is one of the most singular in the world. It is of a circular form, and covers a large extent of ground. The central part, on an eminence on the N. side of the river, is occupied by the kremlin, or citadel, containing the palace of the czars, with cathedrals, monasteries, and squares built at different epochs, and in the most incongruous styles of architecture. The other quarters of the city lie round this central nucleus, increasing in magnitude according as they diverge from it. On the outside of all are the *slobodes*, or suburbs. The Moskva, which has a very tortuous course through the city, is crossed by various bridges, some of stone, but the greater number of wood.

Previously to the conflagration of 1812, which destroyed two-thirds of the city, Moscow presented the most extraordinary contrasts—palaces alternating with huts, Asiatic with European buildings, and open fields and gardens with crowded streets. 'If I was struck with the irregularity of Smolensk,' says Mr. Coxe, 'I was all astonishment at the immensity and variety of Moscow; a city so irregular, so uncommon, so extraordinary, and so contrasted, never before claimed my attention. The streets are in general exceedingly long and broad: some are paved; others, particularly those in the suburbs, formed with trunks of trees, or boarded with planks like the floor of a room; wretched hovels are blended with large palaces; cottages of one story stand next to the most stately mansions. Many brick structures are covered with wooden tops; some of the timber houses are painted, others have iron doors and roofs. Numerous churches present themselves in every quarter, built in the Oriental style of architecture; some with domes of copper, others of tin, gilt, or painted green, and many roofed with wood. In a word, some parts of this vast city have the appearance of a sequestered desert, other quarters of a populous town; some of a contemptible village, others of a great capital.' (Travels in the North, i. 283.) There is no longer any question that the conflagration of 1812 was the act of the Russian government, in the view of rendering it impossible for the French to winter in the city. With the exception of the Kremlin, and the quarter (Bielogorod) immediately surrounding it, on the N., the rest of the city was mostly destroyed; and in some quarters the destruction was so complete that the lines of streets could with difficulty be recognised. The Kremlin, too, though it escaped the conflagration, suffered severely from the mines sprung under its walls, by order of Napoleon, on its evacuation by the French. But this wide-spread desolation was repaired in a very few years. Like a phœnix, Moscow has risen from her ashes larger and more beautiful than ever. The streets have been widened, and the buildings are less singular and discordant; still, however, the old and distinctive character of the city is preserved, being at once 'beautiful and rich, grotesque and absurd, magnificent and mean.' The erection of a wooden house is an easy matter. A market, held in a large open space in one of the suburbs, exhibits a variety of materials for house building, consisting of trunks of trees cut, shaped, and mortised into each other. The purchaser who wants a dwelling repairs to the spot, explains the number of rooms he requires, examines the different timbers, which are regularly numbered, and bargains for what suits him. The whole is either paid for on the spot, and taken away by the purchaser, or the seller may agree to transport and erect it at the place where it is wanted. A dwelling may thus be bought, transported, raised, and inhabited, within a week.

The Kremlin, which has been completely repaired since 1812, comprises the imperial palace, the archbishop's palace, the cathedral of the Assumption, in which the Russian sovereigns are crowned, with the cathedrals of St. Michael and the Annunciation. It also contains the belfry of Ivan Veliki, a tower 269½ ft. in height, having within it, at different stories, 32 bells, some of them of an immense size: on festivals they are tolled without interruption, the Russians being passionately fond of bell-ringing. The great bell of Moscow, weighing 10,000 poods, or 360,000 lbs. (1,600 tons Eng.), is now lying on the ground, at a short distance from the tower of Ivan Veliki. It is said to have been once suspended in a wooden building; but this taking fire, the water thrown upon it, to extinguish the flames, occasioned the large rent now seen in the bell. But the fact of its ever having been suspended is doubtful, and the rent was probably occasioned by some defect in the casting. On festivals, the peasants resort to this bell as they would to a sanctuary. Among the other public buildings may be mentioned the Palace of Arms, in the Kremlin; the foundling hospital; the bazaar, an immense building, containing a great number of shops; the imperial theatre; the hall, for exercising the troops in bad weather, built by the emperor Alexander I., of vast dimensions, being 560 ft. in length, 180 in breadth, and 50 in height, the roof not being supported on pillars; the arsenal; the palace of the senate; the university; the post-office; the Pachkoff palace; the great military hospital. The number of churches, though lessened by the fire, is still immense.

The University, founded in 1755, is the most ancient in Russia. It had, in 1865, 120 professors and sub-professors, and 419 pupils. Among the other educational establishments may be mentioned the gymnasium, dependent on the university; the theological academy, one of the principal

Digitized by Google

in the empire; the medico-chirurgical academy; the military school, or *corps de cadets*, with 600 pupils; the commercial school, founded in 1804; the establishments of St. Catherine and Alexander, for the education of young ladies; the veterinary school; the institute of Lazarus, so called from its founder, with 80 pupils, and a library particularly rich in Armenian literature. There is, however, a great want of elementary schools for the lower classes; Moscow being, in this respect, far below Petersburg, defective as is the latter. There are a large number of literary societies and libraries. The best library belongs to Count Tolstoi. The university library was partly destroyed in 1812, but it has since been enriched by fresh purchases and donations. Several nobles have extensive collections of books, pictures, and medals.

The Foundling Hospital is a vast establishment, and is managed in the best possible manner. The great military hospital has above 1,500 beds, and its organisation is excellent. There is also the hospital of St. Catherine and the hospital of Gallitzen.

Manufactures are prosecuted here on a much larger scale than in Petersburg; but a large proportion of the works on account of the manufacturers and capitalists of Moscow are not in the city, but in the adjoining towns and villages, sometimes at a considerable distance from the capital. The principal establishments are those for the manufacture of cotton, woollen, and silk fabrics, many of which are upon a very large scale, and are fitted up with steam-engines and other improved machinery. Hats, also, are extensively produced; and there are numerous tanneries, breweries, and distilleries.

Moscow is the grand entrepôt of the internal commerce of the empire. It is connected by railway with the principal towns in the empire, and has water communication with Petersburg and Riga, on the Baltic, Astrakhan, on the Caspian, and Odessa, on the Black Sea. In spring, or after the breaking up of the ice, the Moskva is navigable for barks, but during the rest of the season it is navigable for rafts only. A great deal of the commercial intercourse between the city and the adjacent and distant provinces is carried on in winter by the sledge-roads.

Moscow, founded in the middle of the 12th century, was sacked by the Moguls in 1233 and 1293. From the middle of the 14th century, it was considered the capital of Russia. It was taken by the Poles in 1611. In 1703 Peter the Great transferred his residence to St. Petersburg, but Moscow was still regarded by the Russians as the cap. of their empire. It was occupied by the French in 1812; but, after the battle of Borodino, the Russian general set it on fire, and thus compelled the French to commence their disastrous retreat.

MOSELLE, a frontier dép. of France, reg. NE., formerly a part of Lorraine, chiefly between lat. 49° and 49° 30′ N., and long. 5° 30′ and 7° 40′ E., having N. and E. Luxemburg, Rhenish Prussia, and Rhenish Bavaria; S. the dépts. Bas-Rhin and Meurthe, and W. that of the Meuse. Area, 536,889 hectares. Pop. 446,457 in 1861. The E. part of the dép. is covered with ramifications of the Vosges, and the W. with those of the Ardennes mountains; but neither rise to any considerable height. The general slope of the dép. is towards the N., which is the direction followed by its principal rivers, the Moselle in the W., the Sarre in the E., and their affluents, the Ornes and Nied. Some portions of the surface are very marshy. Near the Vosges, where primary formations prevail, the soil is stony; elsewhere it is chalky or clayey, and, in general, of indifferent quality, only about 10,000 hectares being said to be rich land. The arable lands are estimated to comprise 303,913 hectares; pastures, 45,597; woods, 92,228; and orchards and gardens, 11,920 hectares. Besides wheat, oats, and barley, the principal articles of culture are turnips, flax, hemp, and oleaginous plants. Moselle furnishes about 180,000 hectolitres a year of second-rate wine, the best of which is the red wine produced in the arrond. of Metz. The white wines are mostly light. Though the pastures are good, all kinds of live stock, except hogs, are said to be inferior. Quills and honey are important articles of rural produce; cantharides are collected in summer near Metz. Iron, which is everywhere abundant, and usually of good quality, is extensively produced and wrought, especially in the arrond. of Thionville. There are many potteries and some glass factories in the dép. Lorraine is famous for its linen; but the value of those produced in this dép. does not exceed 3,800,000 fr. a year. Woollen cloths, lace, paper, glue, and leather are the other principal products. Manufacturing industry may, in fact, be said to have originated and grown up in this dép. since the revolution; and, in the interval since that event, has made considerable progress. Moselle is divided into 4 arronds.: chief towns Metz, the cap., Briey, Thionville, and Sarreguemines.

MOSELLE (an. *Mosella*), a river of W. Europe, flowing through the E. part of France, and the S. part of Rhenish Prussia; its basin being situated between that of the Nahe to the E., and the Meuse to the W. It rises in the Vosges dép. and mountains, about lat. 48° N., long. 7° E., and runs generally in a NNE. direction, with a very tortuous course, to Coblentz, in lat 50° 22′ and long. 7° 33′, where it joins the Rhine. Before entering the Prussian dom., it traverses the French dépts. Vosges, Meurthe, and Moselle: and separates Dutch Luxemburg from Rhenish Prussia. Its entire course is estimated at nearly 300 m., for about half of which it is navigable. Its average breadth is about 170 yards; its mean depth 6 ft., and its ordinary rate of current about 1½ m. an hour. Its principal affluents are the Madon, Meurthe, Seille, Sarre, and Sure: Epinal, Toul, Metz, Thionville, Treves, Traubach, and Coblentz are on its banks. The surrounding country is subject to its inundations, which do much damage; but it is of immense utility as a channel of internal communication, large quantities of timber, slates, coal, charcoal, brandy, salt, potash, oak bark, glass and earthenware, and wine being sent by it to the Rhine.

MOSTAR, a town of European Turkey, pach. Bosnia, and sandjiak Herzegovina, of which it is the cap., on the Narenta, crossed here by a Roman bridge, 48 m. SW. Bosna Serai: lat. 43° 20′ N., long. 17° 52′ E. Pop. probably under 10,000. It is surrounded by crenellated walls, and its principal streets are on the right bank of the river, about ⅓rd of the town being on the other side. It has a celebrated manufacture of swords and fire-arms, besides an extensive traffic in cattle, corn, and wine, brought thither from a great distance.

MOSUL, a city of Asiatic Turkey, pach. of Bagdad, chiefly interesting as being near the site of Nineveh, the celebrated cap. of the first Assyrian empire. It stands on the W. bank of the Tigris (here very rapid, 300 ft. broad, and crossed by a bridge of boats, as well as an older one of stone), 193 m. NNW Bagdad, lat. 36° 21′ N., long. 43° 11′ E. Pop. estimated at 35,000; of whom, about 9,000 are Christians, 1,500 Jews, and the rest Arabs, Turks, and Kurds. The city is so near the level of the river, that its streets are often

Digitized by Google

flooded; and, like almost every other town in Turkey and Persia, it is in a declining state, its walls being broken down, and its best buildings crumbling into ruins. It has seven gates, and the castle, now in ruins, occupies a small artificial island in the Tigris. Streets narrow and irregular. Houses built partly of stone, partly of plastered brick, with vaulted roofs and ceilings, surrounded by flat terraces. The mosques, of which there are several that possess considerable beauty, the coffee-houses, khans, hummums, and bazaars, are handsomer than in most Turkish towns, and the market is well supplied with provisions from Kurdistan. The Greek Christians have nine churches, and there is a Dominican convent. The principal ornaments of the city are, a college, the tomb of Sheikh Abdul Cassim, and the remains of a fine mosque, the minaret of which was built by Noureddin, sultan of Dasmascus. West of the Tigris, the environs are wholly uncultivated; and this circumstance, combined with the great extent of the cemetery close under the walls, gives it a gloomy and melancholy aspect.

Mosul is under the separate jurisdiction of a pacha of two tails: it formerly had a large caravan trade with all parts of Asia, but has lost much of its commercial importance. It still, however, carries on a trifling trade with Bagdad and Asia Minor; to the former of which it sends, on rafts down the Tigris, gall-nuts and copper, from Kurdistan and Armenia, receiving in return Indian commodities, afterwards forwarded to Diarbekr, Orfah, Tokat, and Aleppo. Its only manufacture is that of coarse blue cotton cloths, used by the lower orders of the pop.

The climate is proverbially healthy, the average temp. of summer not exceeding 66° Fahr.; but in spring, during the floods of the Tigris, epidemics are common, though not often fatal. Several sulphur springs are found within a short distance of the town, and are much resorted to for cutaneous diseases. The geological formation of its immediate vicinity consists, according to Ainsworth, of solid beds of massive, compact, and granular calcareous gypsum, arranged in horizontal strata, not fossiliferous, of a bluish white colour, and extensively quarried as marble. Superimposed on the gypsum is a thin formation of a friable limestone, abounding in shells, and forming the common building stone of Mosul, as it probably also formed that of the ancient Nineveh.

MOULINS, a town of France, cap. dép. Allier, on the river of that name, which is here crossed by a handsome stone bridge of 13 arches, in a fertile plain, 159 m. SSE. Paris, on the railway from Paris to Clermont. Pop. 17,581 in 1861. The streets of the town are narrow and irregular, but clean and well-paved; houses chiefly of brick, but a few also of stone, especially in the principal avenue, the *rue de Paris*. It has 3 public squares, that of the Allier being by far the largest and best built. It is well supplied with water from numerous fountains. The chief public edifices are the churches of Notre Dame and the Visitation, the royal college, established in the suppressed convent of the latter, the town-hall, hotel of St. Cyr, and a recently erected hall of justice. It has also 2 large hospitals, barracks, a public library with 20,000 vols., a museum of natural history, and a small theatre. Several fine walks run in different directions out of the town; and in the neighbourhood are extensive vineyards, and mulberry-plantations for breeding silk-worms. Coal and limestone are wrought at a short distance from the town, and are articles of considerable trade. Moulins is the seat of a tribunal of primary jurisdiction and commerce, a chamber of manufactures, and a society of agriculture, sciences and arts: it has a large manufacture of cutlery, especially scissors, which are highly esteemed, and smaller establishments for making coarse cotton and woollen fabrics, haberdashery, and hats, with steam corn-mills, glass-houses, and tan-yards. It has a considerable trade in corn, wine, silk, timber, coal, and cattle, chiefly with Orleans, by railway, as well as by the Loire navigation.

Moulins, which existed as a town so early as the 11th century, became the residence of the dukes of Bourbon, in 1368. A famous assembly convoked here in 1565, by Catherine de Medici, was followed by the long and sanguinary war of the League.

MOUNT-SORREL (properly, *Mount Soar-hill*), a market town of England, in E. Goscote hund., co. Leicester, pars. of Rothley and Barrow-upon-Soar. Pop. of township, 1,654 in 1861. It derives its name from being situated close to a steep craggy hill of red granite, which rises immediately from the Soar. On its highest point formerly stood a fortress, which, being taken by Henry III., was soon after entirely demolished. The town, built along the old road between London and Nottingham, consists chiefly of houses constructed of granite: the principal buildings are the town-hall (in which the petty sessions for the hund. are held), a church, subordinate to that of Barrow, and three places of worship for dissenters. Mount-Sorrel has some share in the hosiery trade of Leicester.

MOZAMBIQUE, a city and sea-port of E. Africa, cap. of a colony belonging to the Portuguese, lat. 14° 49′ S., long. 40° 45′ E. Pop. estimated at 5,000. It stands on a crescent-shaped island of coral, very low and narrow, and scarcely 1½ m. in length, near the entrance of a deep inlet of the sea, which forms its harbour. The fort, which has six bastions and eighty cannon, is in bad repair: the city comprises a large square, and several narrow, dirty streets lined with lofty houses fast falling to decay. The governor's palace is an extensive stone building, with a flat lead roof, and a square court in its centre. Three churches, an old town-hall, and hospital are the only other public edifices. Black-town, at its S. extremity, is wholly inhabited by negroes, and consists of bamboo and osier huts.

Mozambique was first visited by Vasco de Gama in 1498; and in 1506 Albuquerque made it the centre of the Portuguese possessions in this part of the world, and the seat of the viceroy of the African colonies. When the Portuguese lost their Indian possessions at the commencement of the 17th century, Mozambique began to decline, and has ever since been in a languishing state. The territory, however, still extends from C. Delgado northward to Delagoa Bay southward, having a length of coast exceeding 1,400 m., and comprising, besides the cap., the several settlements of Ibo, Pomba, Conducia, Mokamba, and Quilimane. The channel between the E. coast of Africa and Madagascar is called the Mozambique Channel.

MUHLHAUSEN, a town of Prussia, prov. Saxony, reg. Erfurt, cap. circ., on the Unstrut, 29 m. NW. Erfurt, on the railway from Weimar to Göttingen. Pop. 16,104 in 1861. The town is surrounded by a high wall, flanked with towers, and environed by a ditch; has several Lutheran churches, a gymnasium, 3 hospitals, and an orphan asylum; and is the seat of a judicial court for the town and circ. It has manufactures of woollen and linen cloths, and carpets; with dyeing-houses, fulling and oil mills, distilleries, breweries, and

Digitized by Google

tanneries, and an active trade in corn and dyeing drugs.

MULHAUSEN, or MULHOUSE, a town of France, dép. Haute-Rhin, cap. cant., on the Ill, 22 m. S. Colmar, and 16 m. NW. Basle, on the railway from Strasbourg to Basle. Pop. 45,887 in 1861. Mulhausen is divided into the old and the new town. The former, entirely surrounded by the Ill (here crossed by several bridges), though irregularly laid out, has tolerably broad, well-paved, and clean streets, and some good houses. The Protestant and the R. Catholic par. churches, the synagogue, town-hall, college, arsenal, and hospital, are the principal public edifices. In one of the squares is a column erected to the astronomer Lambert, born here in 1728. The new town, which extends, on the SE. as far as the canal uniting the Rhine and Rhone, is tastefully laid out, and has numerous handsome residences, with the hall of the Society of Industry, the exchange, and the chamber of commerce; it has also a capacious basin on the canal.

Until about the middle of last century, Mulhausen had only a manufacture of woollen cloths, but in 1745 cotton printing was introduced, and it is now one of the principal seats of the cotton manufacture in France. The cotton prints and muslins of Mulhausen and its neighbourhood are second only, as respects the perfection and variety of their patterns, to the silk goods of Lyons. The manufacturers have, in many instances, branch establishments in other parts of Haute-Rhin and in the neighbouring déps.; but it is stated that many of their mills and factories are mortgaged to the inhabs. of Basle; and, in fact, Switzerland furnishes considerable capital to the manufacturers of Alsace. The workpeople, on the whole, are badly clothed, dirty, and lodge generally in cellars, or other comfortless dwellings; but of late efforts have been made, by some of the more wealthy manufacturers, to improve the lodgings by the erection of 'cités ouvrières,' or model lodging-houses.

The spinning mills at Mulhausen have, in recent years, not been in a flourishing condition, owing, to the American civil war of 1861–65, and the attendant 'cotton famine,' and to their being obliged to use cotton imported by way of Havre or Marseilles. Woollen cloths, hosiery, straw hats, morocco leather, and beer are the other principal goods made at Mulhausen, which has also a brisk trade in iron, hardware, and agricultural produce.

Before the Revolution, this town was the cap. of a small republic allied to Switzerland. It was annexed to France in 1798, and has rapidly increased since 1820.

MULL. See HEBRIDES.

MULLINGAR, an inland town of Ireland, prov. Leinster, co. Westmeath, of which it is the cap., on the Brosna, 44 m. W. by N. Dublin, on the Midland Great Western railway. Pop. 5,359 in 1861. The town consists of one principal street, running E. and W., with several diverging streets and lanes. It has a par. church, a very large R. Catholic chapel, a convent, a Presbyterian and a Methodist meeting-house, a large barrack, and the prison court-house and infirmary for the co. Though not an incorporated bor., it sent 2 mems. to the Irish H. of C. till the Union, when it was disfranchised. It has two schools, partly supported by the Educational Board, one attended by about 250 boys, and the other by above 400 girls. Courts leet and baron, for small debts, are held every Thursday; and a court of record, with jurisdiction to the amount of 100*l*. The assizes for the co. are also held here; with general sessions in Jan., April, July, and Oct., and petty sessions on Saturdays. It is a constabulary and revenue police station. The co. prison, built on the radiating plan, contains 100 cells and 15 other rooms for prisoners. It is a large market town for corn, butter, cattle, and other agricultural produce, having an easy communication by railway, as well as by the royal canal, which nearly encircles it, with Dublin on the one hand, and the Shannon on the other. It has two tanneries and a brewery. Markets on Thursdays; fairs, inferior only to those of Ballinasloe, for the sale of cattle, on April 6, July 4, Aug. 29, and Nov. 11, the last chiefly for horses.

MUNICH (Germ. *München*), a city of S. Germany, the cap. of Bavaria, on the Isar, about 220 m. W. Vienna, and 118 m. ESE. Stuttgard, on the railway from Augsburg to Salzburg and Vienna. Pop. 148,201 in 1861. The city stands in the midst of a plain, which is neither fertile nor picturesque, but is one of the most elevated in Europe, being nearly 1,600 ft. above the sea. In the last century it was only a second-rate fortified town, with castellated gates, and quaint ancient-looking houses; but since the beginning of the present century, new quarters and suburbs have so far extended themselves beyond the walls, that the buildings now occupy nearly double the extent of the old town. 'Munich,' says the author of Germany and the Germans, 'has kept pace even with Vienna in the march of modern improvement. This is everywhere visible; for we see new and splendid streets extending in all directions, fine palaces and public edifices, many of them magnificent, surrounded by extensive pleasure-grounds with fine walks and drives: in short, every object shows that it is flourishing beneath the sunshine of peace. Indeed, next to Berlin, Munich is the third city in the Germanic empire; for though Dresden, from its beautiful localities, is more captivating, yet this is the more striking: add to which, the one is dull and stationary, while the other is lively, attractive, and continually advancing in prosperity.' Munich has, however, an unfinished appearance, in consequence of the open spaces that intervene here and there between the numerous edifices, many of which are still incomplete. The old town comprises numerous streets, diverging from a common central square, called the *Haupt-platz*, and running towards the walls, which form round it a species of irregular circle. A large and broad street runs from NW. to SE., called in different parts, the *Neuhausen Strasse*, *Kaufinger Strasse*, and the *Thal*. The *Sendlinger Strasse* is another leading avenue, and two narrow lanes, one of which passes through *Max-Joseph's-platz*, one of the finest squares in Europe, lead to a fine suburban line of streets. The *Ludwig's Strasse*, *Karl's-platz*, and *Maximilian's-platz* skirt the town on its W. and N. sides. The different public edifices that form the principal glory of Munich are chiefly on its N. side. Here also is the *Carolinen-platz*, in the centre of which is an obelisk, 100 ft. high, formed partly out of cannon taken by the Bavarians in the French war. An equestrian statue of the elector Max. I., by Thorwaldsen, decorates the *Wittelsbacher-platz*. The cathedral, a large brick pile, erected at the close of the 15th century, has 2 towers, 333 ft. high, and a fine monument of the emperor Louis of Bavaria. The church of the Theatines (so called from Caraffa, bishop of Theate, the founder of the order) is a large structure in the Italian style, with a central dome flanked by 2 towers. The Jesuits' church, built at the end of the 16th century, is remarkable for its wide roof unsupported by pillars, as well as for 2 fine porticoes of marble, which form its grand entrance: it is 280 ft. in length, and

Digitized by Google

14 ft. wide; has 11 altars and a noble organ, with several monuments, one of which, by Thorwaldsen, to the memory of Prince Eugene Beauharnois, son-in-law of Napoleon, is one of the finest works of its kind. The church of St. Louis, in the Ludwig's-strasse, a brick building faced with marble, in the Byzantine Gothic style, has 2 towers, 220 ft. above the basement, and the nave is 250 ft. in length. The church of All Saints has some fine carvings and fresco-paintings, but is much smaller, and with fewer pretensions to architectural beauty than those before mentioned. There are several other churches on a large scale, and tastefully ornamented with pictures and painted glass windows. The public cemetery lies outside the S. gate, and is of vast extent; open alike to Protestants and Catholics. Not far from it is the General Hospital, a large building having accommodation for nearly 800 patients.

The Royal Palace, or *Königs-residenz*, consists of an older part, built in the 16th century, and comprising 4 irregular court-yards, as well as a more modern part, called *Neubau*, planned on the model of the Pitti Palace at Florence, and fitted up in the most sumptuous style. Some of the apartments are in the style of those seen in Pompeii, and comprise numerous fresco and encaustic paintings, bas-reliefs, and richly carved cornices. At the back of the palace is the *Hofgarten*, a large square planted space, surrounded by arcades, not unlike those of the Palais Royal in Paris, the E. side being occupied by barracks. Connected with the *Hofgarten* eastward is a kind of park, called the English Garden. The new buildings of the palace face Max-Joseph's Square, on another side of which is the opera-house, one of the largest and most elegant theatres in Germany; it is fitted to hold about 2,500 spectators, and is equalled, as respects its performances, only by those of London, Naples, and Milan. Opposite the palace, in the same square, is the new post-office, copied from that of Rome, and in the centre is a statue of the king Maximilian Joseph I., by the celebrated Rauch.

The great glory of Munich consists in its fine galleries of paintings and sculpture, called respectively the *Pinacotheca* (from πίναξ, a picture, and θήκη, a repository), and the *Glyptotheca* (from γλυπτὸς, a carving, and θήκη, a repository). The first of these, in the Baier Strasse, is in the Palladian style with 2 wings, and has a front 500 ft. in length: the public entrance is at the E. end, the corridor is adorned with allegorical frescoes in compartments; and the collection which, for specimens of the Flemish and Dutch schools, is one of the finest in the world, occupies 7 splendid halls and 23 adjoining cabinets on the first floor, the basement story being devoted to the reception of drawings, enamels, and mosaics. The collection of drawings comprises about 9,000, including 5 by Raphael, 30 by Fra Bartolomeo, and several by Rembrandt, Albert Durer, and other Dutch and German artists. The paintings are limited to 1,500, and consist of the *chefs-d'œuvre* from the royal and other collections, including the galleries of Dusseldorf, Mannheim, Deux-Ponts, Schleisheim, and other galleries. Two of the apartments are devoted to the German school, and include the *élite* of the Boisserée gallery, comprising specimens by Albert Durer, J. von Eyck, Schoreel, and Hans Hemling. Three of the rooms contain pictures of the Flemish and Dutch masters, the principal of which are the 'Murder of the Innocents,' 'Fall of the Damned,' and other splendid works of Rubens; the 'Village Fête' of Teniers; the 'Musical Party,' by Netcher; the 'Girl with the Pitcher' and 'The Mountebank,' by Gerard Dow; 'The Wise and Foolish Virgins,' by Schalken, besides numerous highly-coloured works of Vanderwerf and Rembrandt, with various portraits of Vandyck. The specimens of the Italian school, comprised in two apartments, bear no comparison with the invaluable pictures just mentioned; but there are a few fine works by Raphael, Guido, Titian, Domenichino, Annibal Carracci, and Carlo Maratti. Belonging to the Spanish school, also, may be noticed 'The Beggars' of Murillo, several works of Espagnoletto, and some portraits by Velasquez. There are also a few paintings of the English school, and among them is the well known 'Reading of the Will,' by Sir D. Wilkie. The Glyptotheca in the Königs-platz is a chaste and elegant structure, in the Ionic style, erected like the last by the Baron von Klenze, and has a noble central portico, the sides being adorned with statues in niches. The collection is distributed in twelve rooms, each of which is devoted to a distinct epoch in the art, and decorated in accordance with its contents. The walls are of scagliola-work, the floors of marble, and the ceilings richly adorned in fresco and stucco work. The marbles from the temple of Jupiter Panhellenius, in Egina, purchased for 10,000 sequins, occupy an entire room, and are particularly valuable, from their being the only extant specimens of the Eginetan school of statuary. The Ilioneus, however, is said to be 'the gem of the collection,' and one of the finest existing specimens of ancient art. The Roman hall far surpasses the rest in the splendour of its decorations; but the works that it contains belong rather to the declining stage of the arts. The hall of modern sculpture has, among other works, the Paris and Venus of Canova, copied from that at Florence; the Adonis of Thorwaldsen, and a bust of the king by the same artist.

The Leuchtenberg gallery, formed by the late prince Eugene Beauharnois, comprises a choice, though not very extensive collection, including, among other *chefs-d'œuvre*, Murillo's famous Virgin and Child, with several cabinet pictures, by Raphael, Vandyck, Rembrandt, and Velasquez, with numerous works of modern French artists, and a few sculptures by Canova. The royal family are liberal, and perhaps also judicious patrons of art; and nowhere is the modern German school of painting to be seen to greater advantage than in Munich. Several artists are kept in the king's employ, and an Academy of Arts has a triennial exhibition, supported by government, with salaried professors and pensioned students. This exhibition is encouraged, and, in part, supported by a society which devotes annually about 8,000 fl. to the purchase of modern pictures. Munich was the birthplace of Sennefelder, the inventor of lithography; and it has many eminent professors of that art, who have transferred to stone some of the most celebrated works of the Pinacotheca and Glyptotheca.

The University of Munich, originally founded at Ingoldstadt in 1472, and removed thither in 1826, is the principal school of learning in Bavaria. It comprises 20 professors of four different faculties, with 1,300 students, almost exclusively Bavarians, besides a library of about 200,000 vols. Philological and theological seminaries, as well as two gymnasiums, are attached to the university; and the town has polytechnic, central, and subscription schools. The royal library, lately removed to a noble building of great length, and 3 stories in height, is equalled only by that of Paris, the best authorities estimating its contents at 540,000 printed books and 16,000 MSS. The collection of engravings amounts to 300,000, and there are about 10,000 Greek and Roman coins. The museum

Digitized by Google

of natural history is small and poor, containing but few specimens of foreign plants or animals; and the Brazilian collection, made by Spix and Martius during their travels in S. America, though originally good and well selected, has been much neglected. Munich has no very important manufactures, but comprises establishments for bronze-casting, iron-works, sugar-refineries, silk-throwing mills, and tobacco manufactories. Its telescopes are highly celebrated, and its porcelain is exported, like that of Dresden, to different parts of Europe. The last branch of industry is under royal patronage, and is carried on in a large establishment at Nymphenberg, about 3 m. distant, where also is a handsome palace of the king, with parks and menageries, completed at the end of the 17th century.

Munich owes its present distinguished position, as the Athens of S. Germany, principally to the patronage and encouragement of king Ludwig I. It is very doubtful, however, whether he deserves any considerable portion of the praise that has been lavished upon him on this account. On the contrary, those who are best acquainted with Bavaria affirm that the embellishment of the capital has been effected at the expense and injury of the rest of the kingdom; and that the vast sums lavished on buildings and pictures would have been far better expended for other purposes. The immediate environs of Munich abound in taverns and gardens, which are the favourite resort of the middle classes. Beer is the favourite beverage, and waltzes are danced for 6 or 8 hours, without intermission. The beer-houses are exceedingly numerous, and beer is drunk in immense quantities. Some of the breweries are upon a very large scale. The inhabs. are likewise fond of good cheer in other respects, eating and drinking constituting with them the chief business of life. The morals of the inhabs. are alleged to be at a very low ebb; and the number of illegitimate offspring has actually been greater, in certain years, than that of legitimate children.

Munich was founded by Henry, duke of Saxony and Bavaria, in 962, on a site belonging to the monks of Schaffelar, from whom it takes its name. Otho IV. encircled it with walls in 1157, and in 1632 it surrendered to the Swedes and German Protestants, under Gustavus Adolphus. In the war of 1704, between the Austrians and Bavarians, it fell into the hands of the former, after the battle of Blenheim; and it shared also the vicissitudes of the war of 1740, when the elector made his unsuccessful attempt to attain the imperial crown. In 1796 the French army, under Moreau, approached Munich, and obliged the elector to make a separate treaty. The French again occupied Bavaria in 1800, and from the battle of Hohenlinden till 1813 the country remained in alliance with France.

MUNNEPOOR, a territory of India-beyond-the-Brahmaputra. (See CASSAY.) The small town of the same name, cap. Cassay, is in a fertile valley, about 400 m. NE. Calcutta; lat. 24° 20′ N., long. 94° 30′ E.

MÜNSTER, a city of Prussia, cap. prov. Westphalia, and of a reg. and circ. of the same name, on the Aa, a tributary of the Ems, and on the railway from Cologne to Emden. Pop. 27,332 in 1861, excl. of garrison of 4,000 men. The town is well built, is the seat of a R. C. archbishop, of the government, and of the tribunal of appeal for the prov. It has a seminary or college for the instruction of Catholics in theology, a gymnasium, a veterinary school, a botanical garden, and a public library. Principal public buildings, the cathedral, the church of St. Lambert, and the episcopal palace, now occupied by the governor. Münster has manufactures of woollen stuffs and starch, with tanneries and breweries; and a considerable commerce in the products of these, and linen fabrics, hams, and other Westphalian produce. It is united by canals with the Ems, and also with the Vechte, flowing into the Zuyder Zee. The treaty of Westphalia was signed in the town-house, in 1648. The famous fanatic Bocold, surnamed John of Leyden, the leader of the Anabaptists, made himself master of this place in 1534; but the town being subsequently taken by the bishop, John of Leydon and two of his accomplices were put to death, after being confined for a while in iron cages, still preserved in the church of St. Lambert.

MUNSTER, one of the 4 great provinces into which Ireland is divided, comprising the SW. portion of the island, and the cos. of Clare, Kerry, Limerick, Cork, Tipperary, and Waterford. (See IRELAND.)

MURCIA, a prov., and formerly a kingd. in the SE. of Spain, between lat. 37° 20′ and 39° 25′ N., and long. 0° 40′, and 3° 5′ W., bounded N. and NW. by Castile, E. by Valencia, S. by the Mediterranean, and W. by Andalusia. Murcia is at present divided into the two provinces of Murcia and Albacete. United area, 7,877 sq. miles; pop. 582,087 in 1857. It is intersected by numerous ranges of mountains separated by extensive valleys formed by the Segura and its tributaries. The Sierras Segura and Pinoco skirt the country westward, and a chain of mountains runs northward from Carthagena, the highest point in the province being the Sierra España, which rises 5,800 feet above the sea. The mountains are chiefly of limestone, interspersed here and there with other formations. Lead and copper abound; but no mines are wrought. The climate on the sea-coast, and among the mountains, is temperate and delightful, but oppressively hot in the plains. The heat in summer occasionally rises above 100° Fahr. in the shade; and the winters are so mild, that frost is almost unknown. Rain seldom falls, and the sky is usually so clear and blue as to have caused Murcia to be called *el reino serenissimo*. The soil, except on the banks of the Segura, is sandy, dry, and unproductive; above two-thirds of the surface is incapable of cultivation, and only about one-half is fit even for pasture: indeed Murcia is one of the most barren districts in Spain. The *huerta*, however, which lies close to the Segura, is extremely fertile, producing rich crops of wheat, barley, rye, rice, maize, vegetables and fruit, particularly oranges, lemons, pomegranates, and melons; mulberry and olive trees are found in great quantities, and evergreen oaks, as well as pines, clothe the sides of the mountains. Silk and oil are extensively produced, with smaller quantities of saffron and wine. The *esparto* rush grows luxuriantly in the neighbourhood of Carthagena, and, with *barilla*, forms a considerable article of trade. The cattle of Murcia are not numerous, consisting principally of sheep and goats, with only a few horned cattle: the pigs, owing to the abundance of oaks, are almost equal to those of Valencia. Game is abundant, and the coast swarms with a variety of fishes. Wolves, foxes, and wild boar inhabit the mountains. The manufactures are unimportant, being principally limited to the production of coarse linens, silk stuffs, and earthenware, and soap. Carthagena, its only port, has a considerable export trade in cutlery, hemp, ribbons, wine, soda, barilla, and saffron; but the roads of the interior are so bad as almost to prevent intercourse. Three large fairs are held in Sept. at Murcia, Lorca, and Albacete. The inhabs. are proverbial, even in Spain, for pride, apathy, and indolence.

Digitized by Google

Except at Carthagena, the principal inhabs. of which are of French, English, or Italian descent, all classes lead a dull monotonous life, spending their time either in eating and smoking, or else in total inactivity. Agriculture is pursued only from necessity, commerce languishes, and education and science are at the lowest ebb.

Murcia was the part of Spain first conquered by the Carthaginians, who founded *Nova Carthago*, *anno* 202 B.C. The country passed, with the rest of the peninsula, into the hands successively of the Romans, Goths, and Moors, the last of whom invaded it in the beginning of the 8th century. It formed a part of the caliphate of Cordova till 1144, when it was annexed to the kingdom of Granada, to which it belonged down to 1266, when it was taken by Alonso X. of Castile, and has since formed one of the provs. of Spain.

MURCIA, a city of Spain, cap. of the above prov., on the N. bank of the Segura (crossed here by a 'magnificent' stone bridge of two arches), 31 m. NNW. Carthagena, and 250 m. SE. Madrid, on the railway from Carthagena to Madrid. Pop. 26,888 in 1857. The city is situated in a vale which, for beauty and fertility, equals any part of Spain. It was formerly fortified, but is now open on every side, and has narrow though clean streets, lined with mean houses, sometimes ornamented with grotesque carved-work. Gardens often skirt the streets, as in Seville, and the walls in many parts are overtopped by the heavily laden orange trees and branching palms. There are four considerable squares, the largest of which is used for a bull-ring; the principal public buildings are the cathedral, 11 par. churches, the bishop's palace, 5 colleges, a town-hall, custom-house, and hospital. The cathedral is of mixed architecture, with a Corinthian portico and Gothic dome. It formerly possessed great riches in plate and jewellery; but these were abstracted during the late war, and it has now only a few pictures. The chief object of attraction at present is its tower, 260 ft. high, which, like that of Seville, may be ascended by a spiral walk or inclined plane, accessible even to horsemen. In the *Plaza real* is a fine marble column, formerly surmounted by a statue of Ferdinand V.; and there are four public walks, one of which is formed by a mole or quay skirting the river. The botanic garden is small and ill-arranged. The silk manufacture of Murcia, which once employed some thousand hands, now requires only 400. The silk is prepared by hand labour, and cannot therefore come into competition with that of Valencia, which is for the most part produced by machinery. Considerable quantities of coarse cloth are made for the supply of the poor, and there is a manufactory of saltpetre farmed by government to a company, which makes about 1,200 arrobas yearly—only one-tenth of the quantity produced at the close of the last century. About 3 m. from the city is a gunpowder mill, bound to furnish government with 60,000 arrobas a year. Most of the inhabs. are supported by agriculture: the land in the vale of Murcia produces two crops a year. The inhabitants are sluggish, gloomy, and reserved. The African character is more strongly marked in them than in other Spaniards; and the cast of countenance is, in general, very different from that of the Andalusian Moors.

Murcia was little known before the invasion of the Moors, when it was besieged and taken, A.D. 714. It was subject to the caliphate of Cordova from 756 to 1144, when it was annexed to the new Moorish kingdom of Granada. In 1221 it again became subject to Cordova; and, on the dismemberment of that caliphate, was made the cap. of a separate kingdom by Hubiel, from whom it was taken in 1266 by Alonso X. of Castile; since which time it has remained in the hands of the Christians.

MURVIEDRO (*Muri veteres*, but more an. *Saguntum*), a town of Spain, prov. Valencia, on the Canates, about 3½ m. from the Mediterranean, and 15 m. NNE. Valencia, on the railway from Valencia to Barcelona. Pop. 6,915 in 1857. The town stands at the foot of a mountain of black marble, and at the NE. extremity of a large and well irrigated plain; has long, tortuous, narrow streets, and is surrounded by walls flanked with small round towers. The houses in the interior have a mean and gloomy appearance; but the suburbs are more airy and agreeable, and perfectly level. Two churches, three old convents, and a governor's palace are its only public buildings. Murviedro formerly exported considerable quantities of brandy; but its chief dependence, at present, is on the export of the oil, wine, wheat, barley, carobs, and fruit, grown in the adjacent district, sent coastwise to Valencia, and other ports of the Mediterranean.

'Murviedro,' says a modern traveller, 'seems to occupy the same ground as the ancient Roman city; but, in all probability, the Saguntum of Hannibal was built on the summit of the hill. That the Romans, also, had a fortress on the top is clear, from the large stones and regular masonry on which the Saracens afterwards erected their castle. Half way up the rock are the ruins of the theatre, forming an exact semicircle, about 82 yards in diameter from outside to outside: the length of the orchestra, or inner diameter, is 24 ft. The seats for the audience, the staircases, and passages of communication, the vomitoria, and the arched porticos are still easily traced. The back part rests against the hill, and some of the galleries are cut out of the rock. Two walls, going off at an angle, serve to turn off the rain water that washes down from the cliff behind. As the spectators faced the N. and E., and were sheltered from the W. and S., nothing could be more agreeable in this climate than such a place of entertainment, open to every pleasant and salubrious breeze, and defended from all winds that might bring them heat or noxious vapours. It is computed that 9,000 persons might be present, without inconvenience, at the exhibitions in this theatre.' An attempt was made, at the close of the last century, to repair this noble structure, and, in 1796, a Spanish comedy was represented within its walls; but the plan was never carried into execution. The remains of a circus, also, are still discoverable in the orchards outside the town. It extended to a small river, the bed of which only remains, and which was the chord of the segment formed by the circus. When the Saguntines exhibited their mock sea-fights, called *naumachia*, this bed was undoubtedly filled from the neighbouring canals which still exist. A mosaic pavement, 24 ft. in length and 14 ft. wide, in a very perfect state of preservation, was discovered in 1755, at the entrance of the town, and Ferdinand VI. ordered it to be inclosed; but his orders were not carried into effect, and it was, consequently, soon despoiled. Its fragments may still be seen in several houses of Murviedro. Indeed, the city is full of the remains of its antiquity: the walls of the houses, the city gates, and the doors of the churches and inns, are covered with Roman inscriptions.

The ground occupied by the convent of the Trinitarians was formerly the site of a temple dedicated to Diana. A part of the materials served to build the church, and the rest were sold to build *San Miguel de los Reyes*, near Valencia. The castle

Digitized by Google

on the top of the hill presents some interesting remains of Moorish architecture; the fortifications divide the hill into several courts, with double and triple walls, erected on huge masses of rock, laid in regular courses by the Romans.

The prevalent opinion seems to be that Saguntum was originally founded by colonists from Zacynthus, who were afterwards joined by Rutuli from Ardea. (Strabo, lib. iii.; Silius Italicus, ii. 603.) It appears to have early attained to great wealth and distinction; and, being zealously attached to the Romans, it became an object of hostility to the Carthaginians. It was besieged by Hannibal previously to his invasion of Italy; but the strength of the city, and the determined bravery of the inhab., baffled for nearly eight months all the efforts of this great general to effect its subjugation. At length, however, it fell into his hands, *anno* 219 B.C., the inhab. being in part put to the sword and in part sold as slaves. They had previously thrown a great part of their wealth into the flames; but the booty was still ample enough to enable Hannibal to reward the valour and devotion of his soldiers, and to facilitate his designs against Italy. (Polyb., lib. iii.; Livy, lib. xxxi. cap. 9.) Having been rebuilt by the Romans, it was afterwards famed for its porcelain, mentioned by Martial (xiv. epig. 108.):

'Sume Saguntino pocula ficta luto.'

MUSCAT, a city and sea-port on the E. side of Arabia, prov. Oman, of which it is the cap., about 96 m. NW. Cape Ras-el-had; lat. 33° 38′ N., long. 58° 37′ 30″ E. Pop., estimated at from 10,000 to 12,000, of whom 1,000 are Hindoos, and the rest a mixed race, the descendants of Arabs, Persians, Kurds, Afghans, Belooches, settled here for the purposes of commerce. The town is situated at the S. extremity of a small cove, shaped like a horse-shoe; and on either side hills, lined with forts, rise almost perpendicularly 300 ft. from the sea. It is built on a slope, rising gradually from the water, which nearly washes the bases of the houses. On this side it has no defence; but the other sides are protected by a wall 14 ft. high, with a dry ditch. Its mosques, minarets, and white terraced houses give it an imposing aspect when seen from a distance; but, on entering, narrow crowded streets, and filthy bazaars, wretched huts, paltry houses, and other tenements more than half fallen to decay, meet the eye in every direction. It has, however, some substantial and even handsome houses; the palace of the imaum, those belonging to his mother, the governor's, and several others being of the latter description: their form differs considerably from what is usually seen in the towns of Yemen and the Hedjaz, partaking more of the Persian than Arabian style of architecture. Muscat is supplied with water by means of a deep and strongly guarded well, from which a newly constructed aqueduct conveys it to tanks in the different quarters. During July and August it is excessively hot, and the fevers then prevalent are especially fatal to Europeans. The country in its immediate vicinity is extremely barren, but it improves as it recedes inwards. Dates and wheat are the principal articles of produce, the former being held in high estimation, and largely exported, chiefly to India. A date tree is valued at from 7 to 10 dollars, and its annual produce from 1 to 1½ dollar. The value of estates is measured by the number of date trees comprised within the property.

Muscat is a place of considerable importance, being at once the key to, and commanding the trade of, the Persian Gulf. The dominions of the imaum are very extensive, and his government is more liberal and intelligent than any other in Arabia or Persia. He has some large ships of war, and his subjects have some of the finest trading vessels to be met with in the Indian seas. The part of Arabia near Muscat is too poor to have any very considerable direct trade; but, owing to its favourable position, and the superiority of its ships and seamen, it has become an important entrepôt, and has an extensive transit and carrying trade. Most European ships bound for Bussorah and Bushire touch here, and more than half the trade of the Persian Gulf is carried on in ships belonging to its merchants. But exclusive of the ports on the gulf and the coast of Arabia, ships under the imaum's flag trade to all the ports of British India, to Singapore, Java, the Mauritius, and E. Africa. The pearl-trade of the Persian Gulf is now, also, wholly centered at Muscat. All merchandise passing up the gulf in Arab bottoms pays a duty of ½ per cent. to the imaum. He also rents the islands of Ormuz and Kishmee, the port of Gombroon, and some sulphur mines from the Persian government.

In the magazines of Muscat may be found every species of produce imported into, or exported from, the Persian Gulf. Various articles are also imported for the use of the surrounding country, and for the internal consumption of Arabia. Among these, the principal are rice, sugar, coffee from Mocha, cotton and cotton cloth, cocoa nuts, wood for building, slaves from Zanguebar, and dates from Bushire and Bussorah. Payment for these is chiefly made in specie and pearls; but they also export drugs of various descriptions, ivory, gums, hides, ostrich feathers, horses, a sort of earthen jars, called martuban, to Tranquebar, dried fish, an esteemed sweetmeat called *halwah*, and a few other articles.

The markets of Muscat are abundantly supplied with all sorts of provisions. Beef, mutton, and vegetables of good quality may be had at all times, and reasonably cheap. The bay literally swarms with the greatest variety of most excellent fish. Water is excellent, and is conveyed to the beach in such a manner that the casks of a vessel may be filled in her boats while afloat. Firewood is also abundant, and is cheaper than at Bombay.

Niebuhr thinks that Muscat occupies the site of the Mosca of Arrian and other Greek writers (Voyage en Arabie, ii. 71, ed. Amst. 1780); a conjecture which seems to be confirmed, not merely by the resemblance of the name, but also by the terms applied by Arrian to Mosca being sufficiently descriptive of Muscat; and as the port is bounded on all sides by rocks, it must now present almost the same appearance as in aniquity.

MUSSELBURGH, a parl. bor. and market and sea-port town of Scotland, co. Mid Lothian, on level ground, at the mouth of the Esk, in the Frith of Forth, 5 m. E. Edinburgh, on the Edinburgh-Berwick railway. Pop. 7,423 in 1861. The town is well built: the main street runs nearly E. and W., with a slight curvature, parallel to the bay; and it has a great many subsidiary streets. It has numerous villas, which is accounted for by its vicinity to Edinburgh, and its salubrity. Fisher Row, which contains many modern buildings and new streets, is separated from Musselburgh, properly so called, by the Esk, the communication between them being kept up by means of 1 wooden and 2 stone bridges, one of the latter being old and little used. The other stone bridge is a modern and handsome structure, after a design by Rennie. The only public buildings are a gaol, an ancient edifice surmounted by a spire, and the parish

Digitized by Google

church of Inveresk (in which parish the town is situated). The latter, on an abrupt eminence ¼ m. from the town, is a conspicuous object in every direction. On the shore immediately adjoining the town on the E., are extensive downs or links, used since 1817 for the Edinburgh races, and for the game of golf, which is much practised here.

Musselburgh has flax-mills, and many weavers of sail-cloth and other fabrics. The manufacture of hats is, also, carried on to a limited extent; and there are brick-works, a pottery, extensive breweries and distilleries, tanneries, and flour-mills. Fisher Row, along with Newhaven, in the parish of North Leith, virtually monopolises the supply of Edinburgh with haddocks and other white fish. A branch of the Edinburgh and Dalkeith railroad has its depôt at Fisher Row. The country all round the bor. abounds with coal, which, by means of the railroad, is conveyed to Edinburgh, and by another branch of the same railway is taken to Leith, for consumption and export. There are two banks in the town. The harbour dries at low water. The exports are coal, spirits, ale, and farm produce.

The schools are numerous and efficient. Gilbert Stuart, author of a history of Scotland and other works, resided at Musselburgh; and New Hailes, the residence of Lord Hailes, the annalist and antiquary, is within ½ m. of the town. The chapel of Loretto, to the E. of the town, was, before the Reformation, a place of great importance; pilgrimages were often made to it; and, in 1530, James V. performed a pilgrimage thither on foot. About ½ m. S. of Pinkie House was fought, on the 10th Sept., 1547, the battle of Pinkie, in which the English, under the Duke of Somerset, totally defeated the Scotch. The battle of Preston Pans, on 21st Sept., 1745, between the forces of Charles Edward and the royal army, took place in this neighbourhood, when the latter were completely defeated.

Musselburgh had no parl. rep. till the passing of the Reform Act. It now unites with Leith and Portobello in sending 1 mem. to the H. of C. Registered voters in the district 2,501, and of Musselburgh alone 304, in 1865.

MYSORE (*Maheshasura*), a prov. of S. Hindostan, between lat. 11° 30′ and 15′ N., and long. 74° 45′ and 78° 40′ E., within the territory of the Madras presidency. Its shape is nearly rhomboidal; greatest length, N. to S., 240 m. by an extreme breadth of about the same The whole country consists of a table-land enclosed on the E., W., and S. by the Ghauts; and varying from 1,900 to 4,600 ft. in elevation above the sea, with a gentle slope towards the N. The Zoongabuddra, Penaar, Colair, and Coleroon all rise within this prov., which has, however, no river of much size. The climate is one of the most salubrious within the tropics; the air is temperate and bracing, and the deluging rains, which prevail on either side beneath the Ghauts, are here unknown. The soil, which is mostly of the red and black varieties common in the Deccan, is continually watered by refreshing showers; and produces not only most of the grains and vegetables of other parts of India, but also many of the fruits of Europe. Extensive tracts are overrun with jungle, especially of the date palm, and from the remains of hedges, the prov. appears at a remote period to have been in a much higher state of cultivation than at present, though it has recovered to a great extent, from its previous devastations, since the period of peace, commencing with the present century. Rice, sesamum, sugar, coffee, betel leaf, castor oil, and cocoa nuts are the principal articles of produce. Though an inland country, the cocoa palm is almost everywhere abundant, great quantities of salt and soda efflorescing on the soil. About Colar, the poppy is raised, both for making opium and for its seed. Potatoes are grown, and exported to Madras and elsewhere. Tobacco is of inferior quality, and is not much cultivated. From the great imperfection of agricultural implements, and the inferiority of the cattle, the fields are very imperfectly ploughed; but the soil is, in many parts, extremely productive, with the aid of little labour. The cottages of the peasantry are, on the whole, neater and more commodious than in most parts of India. They are almost universally constructed of the red soil of the country, and roofed with tiles; nor are the best habitations of different materials, or otherwise distinguished from the rest than by their size, and from being whitewashed. The inhabs. are nearly all Hindoos.

MYSORE, a town of S. Hindostan, the cap. of the above state, on a lofty hill, 9 m. S. by W. Seringapatam, lat. 12° 19′ N., long. 76° 42′ E. It was suffered to fall into decay by Hyder Ali and Tippoo, but, under the present dynasty, it has been rebuilt, and restored to its ancient importance. It is enclosed by an earthen wall, and consists of the town (pettah) and fort. The latter, which is an extensive work in imitation of a European fortress, is separated from the pettah by an esplanade, and comprises, besides the rajah's palace, the dwellings of the principal merchants and bankers. The architecture of the town is similar to that of Seringapatam, but the houses are larger and better; they are ranged in regular streets, whitened, and intermingled with trees and temples. S. of the fort is a large and good suburb; and on rising ground, near the town, is the British residency. Mysore is well supplied with provisions, and is considered much more healthy than Seringapatam.

MYTILENE, the ancient Lesbos ('*insula nobilis et amœna*,' Tacit. Hist., lib. vi. cap. 3), an island of Turkey in Asia, in the Ægean Sea, opposite the coast of Asia Minor, to the north of the entrance to the Gulf of Smyrna. It is about 33 m. in length from E. to W., by about 26 in breadth. The strait by which it is separated from the main land varies in breadth from 7 to 10 m. Though in part hilly and mountainous, it has notwithstanding a considerable extent of level and very fertile land; and, except in a few places infested with malaria, it is extremely salubrious. The principal products are oil, corn, wine, figs and other fruits, cotton, timber and pitch, silk, and honey. The wines of Lesbos were amongst the most celebrated of the ancient world. They are said by Athenæus (i. 22.) to have deserved the name of ambrosia, rather than of wine, and to have been like nectar when old.

> 'Hic innocentis pocula Lesbii
> Duces sub umbra.' Hor. Od. i. 17.

The wine of the island still continues to preserve some, though but a slender, portion of its ancient reputation: very little, however, is exported. The figs are excellent, and large quantities of oil of medium quality are annually shipped for Constantinople and other places. The produce of corn is insufficient for the supply of the island. The timber and pitch are derived from the pine forests with which the mountains are covered. The town of Castro, on the site of the ancient *Mytilene*, stands on the E. coast of the island, on the strait separating it from Anatolia. It contains many fragments of pillars, capitols, and friezes, but no considerable ancient ruin: it may have from 5,000 to 6,000 inhab.; and has two harbours, but neither is good. The island can, however, boast of two

Digitized by Google

of the finest harbours in the world,—Port Jero, or Olivier, and Port Caloni. The former, in its SE. angle, has a narrow entrance, but the water is deep, and within it expands into a noble basin, capable of containing the largest fleets. Port Caloni, on the S. side of the island, is a basin similar to the last mentioned, but of more ample dimensions, nearly, in fact, intersecting the island. It has deep water throughout; but the entrance to it being very narrow, it is but little frequented.

Lesbos was one of the most celebrated of the Greek islands. It had several cities, of which Methymna and Mytilene were the most celebrated. The latter was distinguished alike by the magnificence of its buildings, the amenity of its climate, its proficiency in the *belles-lettres* and philosophy, the number of its great men, and the luxury and refinement of the inhabitants. Epicurus is said to have read lectures in Mytilene; and Aristotle resided in it for two years to profit by the society and conversation of its learned men. At a later period it became, like Rhodes, a favourite resort of those Romans who preferred quiet enjoyment to the turmoil and bustle of Rome.

'Laudabant alii claram Rhodon, aut Mytilenen.'
Hor. Od. i. 7. 1.

Among the illustrious persons who were natives of the city of Mytilene, or of other parts of the island, may be specified—Pittacus, one of the seven sages of Greece; Theophrastus, the scholar and successor of Aristotle; Alcæus, so famous for his odes; Sappho, celebrated alike for her beauty, her poetical talents, her loves, and her death; Terpander, who added a seventh string to the lyre; and Diophanes, a famous rhetorician, tutor to Tiberius Gracchus. At the same time, however, it must be admitted that the morals of the bulk of the inhabitants were exceedingly corrupt, so much so, that it was common in antiquity to say of a debauchee, that he lived like a Lesbian. (Cellarii Orbis Antiqui, ii. 15.)

Mytilene was taken and sacked by Julius Cæsar; but Pompey restored it to the full enjoyment of its privileges; and Trajan, who enriched it with several costly buildings, gave it the name of *Trajanopolis*, which, however, it did not retain. Molivo, on the N. coast of the island, is the modern representative of the ancient Methymna.

N.

NAAS, an inland town of Ireland, prov. Leinster, co. Kildare, 18 m. SW. Dublin, on the railway from Dublin to Ballinglass. Pop. 2,959 in 1861. The town possesses considerable local advantages. Situated in a rich agricultural district, near the metropolis, its communication with that city is facilitated by railway as well as by means of a branch of the grand canal that enters the town. Its main street, also, presents some appearance of activity, owing to its forming the place of junction of the leading roads from Cork, Limerick, Kilkenny, and Waterford to Dublin. However, far from keeping pace in improvement with the market towns in its vicinity possessed of none of these advantages, its prosperity has been on the decline for the last 15 years. The appearance of the cabins on the outskirts of the town is poor and miserable, many being ruinous. The public edifices are the parish church, a Rom. Cath. chapel, a meeting-house for Independents, military and police barracks, a market-house, a fever hospital and dispensary, a court-house, and a prison. The spring assizes for the co. are held here, and the summer assizes at Athy. Its trade in grain, flour, and provisions is not so considerable as might have been expected. Markets, especially for poultry, on Mondays and Thursdays.

NAKHITCHEVAN, a town of European Russia, gov. Ekaterinoslaf, on the Don, about 25 m. above where it falls into the Sea of Azoff. Pop. 13,178 in 1858. This and the contiguous town of Rostoff are, as it were, the entrepôts of the Don. Except timber, most part of the produce brought down that great river is landed at one or other of these towns, and is thence forwarded by coasters for Taganrog. Nakhitchevan is built in the Oriental style, and its inhab. are distinguished by their commercial enterprise. The connections they have formed with Astrakhan, Mordok, and Kisliar, also colonies of Armenia, have given rise to an active commercial intercourse. They draw from these countries rice, silk, a vast quantity of wine, and Kisliar brandy, in great esteem in Russia. They receive, moreover, from the Caucasus, all the rough produce of the country. By constantly frequenting the fairs, which in the adjacent towns and villages are very numerous, even to the distance of some hundred versts, the Armenians have formed the means of making themselves masters of the trade of the interior of the S. part of Russia.

NAGPOOR (*Nagapura*,' the town of serpents'), a large city of Hindostan, prov. Gundwanah, between the Wynegunga and Wurdah rivers; lat. 21° 9′ N., long. 79° 11′ E. Pop. of the city and suburbs estimated at 115,000. Its site is low and swampy in the rains; and the principal streets, with one exception, are narrow, mean, dirty, and intersected by watercourses. The great number of trees intermixed with the huts and houses give it, at a distance, the appearance of a large wood. It presents few good specimens of architecture; the rajah's palace, though an extensive building, has no pretensions to beauty, and has crowded round it a multitude of mean huts of mud and thatch. Some of the principal chiefs and bankers have large houses of brick and mortar, with flat roofs; but these, for the greater part, are old and dilapidated. The rest of the dwellings are principally of mud, thatched or roofed with tiles.

NAIRN, a small marit. co. of Scotland, on the S. side of the Moray Frith, having N. the sea, E. Moray, and S. and W. Inverness: it also includes the detached district of Ferintosh, in the centre of Inverness. Area, 215 sq. m., or 137,500 acres, of which about a third is supposed to be arable. It is in all respects similar to Moray, with which it is united, under one sheriff. Along the shore it has a belt of low, flat, sandy soil, mostly suitable for the turnip culture, but in parts barren, owing to the sand being dry and movable. The valley watered by the Nairn is generally fertile and well cultivated; but the rest of the co. is mostly rugged and mountainous. The statements as to the size of estates and farms, houses, tillage, and stock in the article MORAY, apply equally to this county Exclusive of the Nairn, it is watered by the Findhorn and some smaller streams. Except Nairn, it has no town of any importance; and it has neither mines nor manufactures. The co., which unites with Moray in sending 1 mem. to the H. of C., had 170 reg. voters in 1865: the bor. of Nairn

Digitized by Google

unites with Inverness in sending another mem. to the H. of C. Nairn is divided into 6 parishes, and had, at the census of 1861, 2,023 inhabited houses, with 10,065 inhabitants. The old valued rent was 1,263*l.*, and the new valuation 28,865*l.* 1865.

NAIRN, a royal and parl. bor., sea-port, and market town of Scotland, cap. of the above co., near the mouth of the river of the same name, on the railway between Aberdeen and Inverness, 15½ m. NE. the latter, and 72 m. NW. by W. the former. Pop. 3,827 in 1861. The river is here crossed by a substantial bridge. The only public buildings are the court-house, gaol, established church, Free church, two dissenting chapels, and a large inn, built by subscription. The harbour is accessible only for small vessels; and grain, cattle, timber, salmon, herring, and other white fish are exported to London and other markets. Indeed, the fisheries may be said to be the staple branch of industry of the town. The means of education are ample. Here are no fewer than 3 banks. It joins with Inverness, Forres, and Fortrose in sending a mem. to the H. of C. Registered electors 133 in 1865.

Nairn was created a royal bor by William I., in the 12th century. In the vicinity is Cawdor Castle, once a fortress of great strength, but now a ruin. It gave the title of 'Thane' to Macbeth, and Shakspeare has made it the scene of the murder of the 'gracious Duncan.' It now gives the title of earl to a branch of the Campbells of Argyle. Lord Lovat found refuge in a corner of this fortalice, after the battle of Culloden, in 1746.

NAMUR (Flem. *Naemen*, Lat. *Namurcum*), a strongly fortified town of Belgium, cap. prov. of same name, on the Meuse and Sambre at their junction; 33½ m. SW. Liège, and the same distance SE. Brussels, on the railway from Paris to Liège. Pop. 26,205 in 1860. The town is surrounded with good walls, and has strong outworks on both sides the Meuse and Sambre, and is further defended by a citadel, erected in 1817, on the elevated site of a former citadel, demolished by Joseph II. It is well built; many of the streets are broad and clean, and the houses are mostly of bluish stone, roofed with tiles. The cathedral, a modern edifice, with a handsome Corinthian portico, and a dome, is principally remarkable for its containing the tomb of Don John of Austria, the conqueror of the Turks, at the famous battle of Lepanto. The church of St. Loup, a richly ornamented building, and that of Notre Dame, with some good sculptures; the new town-hall, several hospitals, and a theatre are the other principal public edifices. A bridge crosses each river, that over the Meuse having nine arches: a dam has here also been thrown across the Sambre with the view of raising its waters so as to render it navigable. Namur is a bishop's see; the seat of tribunals of primary jurisdiction and commerce, with appeal to the superior courts at Liège, and the residence of the civil governor of the prov., a military commandant, and a provincial receiver of taxes. It has an episcopal seminary; an atheneum with a library and cabinets of mineralogy; various public and superior private schools, a society for the benefit of the poorer classes, a deaf and dumb and many other asylums. The situation of Namur is favourable for commerce. Its cutlery is much esteemed on the Continent, and it has tanneries, potteries, and brass and iron works; but its manufactures are less flourishing than formerly. The coal and iron mines, and marble quarries of its neighbourhood, are, at present, the principal sources of employment and wealth to its inhabs. It has four annual fairs, one of which, beginning on July 2, lasts 15 days.

Namur is supposed to occupy the site of the *Oppidum Adnaticorum*, mentioned by Cæsar. Like other cities in the low countries, it has frequently suffered from the ravages of war. In modern times it sustained two memorable sieges, one in 1692, when it was taken by Louis XIV., and the second in 1695, when it was retaken by the Anglo-Dutch under William III. The first is the subject of Boileau's famous ode 'Sur la Prise de Namur.'

NANCY, a town of France, dép. Meurthe, of which it is the capital, in a fine plain, near the Meurthe, 30 m. S. Metz, and 175 m. E. by S. Paris, on the railway from Paris to Strasbourg. Pop. 49,305 in 1861. Nancy is one of the handsomest towns of France. It was formerly surrounded with walls, but these were demolished under Louis XIII. and Louis XIV., and the citadel is its only existing fortification. It is, however, still entered by several gates, some of which have much beauty. Nancy is divided into the old and new town. The first is, in general, irregularly laid out, though it comprises several good streets and squares, many superior private residences, and most of the principal public edifices. Among the latter are the remains of the palace of the dukes of Lorraine, now converted into a barrack for the gendarmerie; the church of the Cordeliers, a structure of the 15th century, in which are various interesting monuments; the church of St. Epore, and the ducal chapel. The imperial court, the tribunal of commerce, and prefecture are in the *Place Carrière*, a square communicating with the *Place Impériale*, in the new town, by a noble triumphal arch. The new town, which, however, is as old as 1603, is remarkable for the elegance and regularity of its streets, which mostly intersect each other at right angles. The *Place Stanislas* is a square surrounded by fine edifices, all built on the same plan, comprising the town-hall, the bishop's palace, and theatre. Its angles are ornamented with iron gateways and fountains, and in its centre is a bronze statue of Stanislaus, king of Poland and duke of Lorraine, erected by voluntary subscription throughout the duchy, in 1823. Stanislaus, to whom numerous establishments in the town, both scientific and charitable, owe their foundation, is buried, as well as his consort, in the church of *Bon Secours*, which has two marble monuments to their memory. The cathedral is a modern edifice of Corinthian and composite architecture. The remaining principal buildings are the university, with a library of 23,000 volumes, the royal college, seminary, civil and military hospitals, a workhouse for the dépts. Meurthe and Vosges, and a house of correction. Nancy is a bishop's see, and the seat of a royal court for the dép. Meurthe, tribunals of original jurisdiction and commerce, a board of taxation, and a chamber of manufactures. It has an *académie universitaire*, a society of science and literature, a school of forest economy, a communal college, Protestant, Jewish, and other schools; manufactures of woollen cloth, hosiery, lace, muslins, cotton yarn, liqueurs, and chemical products, with tanneries, dyeing-houses, and refineries of saltpetre for the gunpowder factory at Mentz. Nancy is famous for its shot (*boules vulnéraires d'acier*).

No record exists of this town previously to the 11th century, but in the 13th it became the cap. of Lorraine. It was twice besieged by Charles the Bold, of Burgundy, who was killed under its walls in 1477.

NANGASAKI, a large town and sea-port of Japan, on the SW. side the island of Kiu-siu, and

Digitized by Google

the only place in that empire accessible to Europeans, 600 m. WSW. Yedo; lat. 32° 43′ 4″ N., long. 130° 11′ 47″ E. Pop. estimated at from 60,000 to 70,000. It is situated on the slope of a hill, and, like every other Japanese town, is regularly built, with wide and clean streets. The houses, however, are low, none containing more than one good story, to which is added in some a sort of cockloft: in others, a low cellar; all are constructed of wood and a mixture of clay and chopped straw; but the walls are coated with a cement that gives them the appearance of stone. The height of the street front, and even the number of the windows, are determined by sumptuary laws. Oiled paper supplies the place of glass, and the windows are further protected from the weather by external wooden shutters and Venetian blinds: a verandah, into which the different rooms open, runs round the outside of the houses, to which are invariably attached curiously laid-out gardens. Large detached fire-proof store-rooms belong to each dwelling, and are so constructed as fully to answer their purpose of preserving the valuables of the inhabs. from the conflagrations so common here and elsewhere in Japan. The chief public buildings are the palaces of the governor and grandees of the empire, some of which cover a considerable extent of ground: there are also in the town and neighbourhood 61 temples, or *yasiros*, usually on commanding eminences, and enclosed in large gardens, the habitual resort of pleasure parties. These buildings are as plain and little ornamented as the private dwellings, and comprise, also, monuments, which are let out to travellers, or used for banqueting rooms and other purposes. The tea-houses, or *oagnios*, are another favourite resort of the natives; and of these, according to Siebold, there are 750 in Nangasaki. The artificial island of Dezima, to which the foreign merchants were formerly confined, is about 600 ft. in length by 240 in breadth, a few yards from the shore, close to which stands the town, connected with it by a stone bridge, closed by a gate and guardhouse, constantly occupied by soldiery. By a treaty concluded with Great Britain, France, and the United States in August, 1858, the port of Nangasaki was thrown open to foreign commerce. The following table shows the commerce of Nangasaki in each of the years 1861 and 1862:—

Nationality of Vessels	Imports		Exports	
	1861	1862	1861	1862
	Dollars	Dollars	Dollars	Dollars
Dutch	113,511	Not stated	221,038	Not stated
British	413,931		491,775	
American	140,783		252,019	
French	998		6,485	
Total	669,261	—	1,001,317	—
	£		£	
	139,429	525,000	208,603	750,000

The harbour of Nangasaki extends NE. and SW. about 7 m., being in most places less than a mile in width. Ships lie in 5 or 6 fathoms water within gunshot of the town, and protected from all winds.

NANKIN, a city of China, in the district of Kiang-ning-foo, and prov. Keang-soo, near the S. bank of the Yang-tse-kiang, and about 110 m. from its mouth, lat. 32° 4′ N., long. 118° 24′ E. Pop. about 400,000. The walls, which are of limestone, cemented with sun-baked clay, enclose a very irregular triangular area of about 30 sq. m., and this circuit, as measured by the Jesuits, amounts to 57 *lis*, or nearly 20 m., a fact fully proving the absurdity of the Chinese statement that, 'if two horsemen should go out in the morning at the same gate and ride round in opposite directions, they would not meet before night.' This enclosure, moreover, comprises groves, fields, and even hills, of considerable extent; less than three-fourths of it being covered by the town, which is situated at the S. extremity, and about 6 m. from the river bank. The city has declined much both in size and splendour since the end of the 13th century, when Kublai-Khan removed the imperial residence to Pekin. It now consists of 4 rather wide and parallel avenues, intersected by 6 or 8 others of less width. The streets are not so broad as those of Pekin, but are, on the whole, handsome, clean, well paved, and bordered with well furnished shops. A palace of the emperor, which once existed, and many other monuments of grandeur, have now almost disappeared. Nor are the palaces of the mandarins in any respect distinguished from those found in the caps. of other provs. of China; indeed, Nankin possesses no public edifices corresponding to its rank as the second city of the empire, except its famous porcelain tower, belonging to one of the pagodas, several temples, and its gates, some of which are of extreme beauty. The Porcelain tower (called *Paou-gan-sze*), 'pagoda of gratitude,' which is unquestionably finer than any similar structure throughout China, is an octagonal building, each side 15 ft. wide. It consists of 9 equal stories, communicating by a spiral staircase running up the centre of the building, and each comprising one saloon finely painted, gilt, and adorned with idols. The outside wall is white, made of the white bricks commonly used in China: a kind of carved gallery or verandah, ornamented with lightly-tinkling bells, runs round each story, and the whole is surmounted by a gilt conical roof, the height of which from the base somewhat exceeds 200 ft. It was completed in 1432, at a cost of 400,000 taels. An observatory stands about a league northward of the pagoda, but though formerly well provided with instruments, it is now almost in ruins. Nankin has extensive manufactures of satin and crape, the quality of the former, both plain and figured, not being equalled by that of any other city in China. The cotton fabric called Nankeen receives its name from this city; but in fact it is made in every part of the prov., and scarcely a cottage can be found where the thrifty housewife has not a loom for weaving Nankeen. The paper of Nankin is highly esteemed; and Indian-ink (as it is called in Europe) is manufactured in large quantities both in the town and neighbourhood, forming an important article of commerce. Nankin is celebrated also for its manufacture of artificial flowers from the pith of a shrub, and so extensive is this branch of industry as to give rise to a large trade. The commerce of the city is very considerable, owing to its position in the centre of the empire, and on the Yang-tse-kiang, which is navigable for small boats to the ports of Soo-cheo-foo and Shang-hae, its great entrepôts for corn, manufactured goods, and other articles. Its communication with Pekin is effected by the imperial canal, which leaves the river about 40 miles below Nankin: the principal trade with the cap. is during April and May, when fast boats, which accomplish the distance in about 9 days, are constantly employed in exporting to the imperial court the produce of the Nankin fishery packed in ice. Nankin is not less celebrated for literature than commerce: the arts and sciences are studied there with great diligence, and it furnishes more doctors and mandarins than many towns together: its libraries are also extensive and valuable. The booksellers' shops are well

Digitized by Google

provided with the best native publications, and the editions published here are the most esteemed in the empire.

Nankin, which began to decrease in the time of Kublai-khan, was further diminished by the removal of the 6 great tribunals to Pekin, which caused its name Nankin ('Court of the South') to be changed to Kian-nin in all the public acts: in common usage, however, it retains its old appellation. It is still the residence of one of the great viceroys called *Tsong-tuh*, to whose jurisdiction are committed all the judicial affairs, not only of this prov. but of that also of *Kiang-si* and *Ganhway*. The Manchoo-Tartars have here an extensive military depôt under a general of their own nation, and their quarters are separated from the rest of the town by a lofty wall.

NANTES (an. *Namnetes*, or *Civitas Namnetum*), a large and celebrated commercial city and port of France, dép. Loire-Inférieure, of which it is the cap., on the Loire, where it is joined by the Erdre and Sevre-Nantaise, about 40 miles from its mouth, and 210 m. SW. Paris, on the railway from Paris to St. Nazaire. Pop. 113,625 in 1861. Nantes is a noble city, and its situation can scarcely be excelled. It stands upon the slopes and summit of a gentle hill, half encircled by the Loire, which is broad, clear, and tolerably rapid; and its beauty is greatly increased by several islets which dot the river exactly opposite to the town, and which are covered with pretty country-houses and gardens. The banks of the Erdre too are very agreeable, abounding with chesnut woods, gardens, and country houses. The declivities of the neighbouring hills are in great part covered with vineyards, which add much to the beauty of the scene, though their produce be very inferior. Nantes is built mostly on the N. bank of the Loire, but partly, also, on the islands *Feydeau* and *Gloriette*, in which are some of the handsomest quarters. Both the N. bank and the islands are bordered by fine quays, one of which, *Quai de la Fosse*, full half a league in length, is broad, and shaded by fine elms, and bordered with balconied terraces and warehouses. The Quays *des Braces* and *Port Maillard* are also planted with trees, being at once well frequented promenades, and the principal seats of commercial activity.

Nantes was formerly fortified, but its ramparts have been mostly demolished, and it is now an open town communicating with 4 considerable suburbs. Towards the E. end of the city are the *Cours de St. Pierre* and *St. André*, two public walks planted with trees and separated by the square of Louis XVI., in which is a statue of that monarch surmounting a Doric column about 80 ft. in height. These *Cours*, with the *Boulevard*, W. of the Erdré, another fine promenade of the same kind, are on a portion of the site formerly occupied by the fortifications. There are, however, some remains existing of various fortresses erected in the middle ages. In the E. part of the city, skirting the river, is the large and imposing castle of the ancient dukes of Brittany, a mass of irregular buildings, surrounded by thick walls flanked with solid round towers. It was founded in the 10th, but it was not till the 15th century that it became a place of any great strength. It is now chiefly dismantled, and is the residence of the military governor and a powder-magazine. Between the Erdré and Loire are some remains of the Château de Bouffay, a structure also dating from the 10th century, consisting of some lofty walls surrounding a polygonal tower; and, on the bank of the Loire, are the ruins of the Tour de Pirmil, erected in 1365. The city is, in general, regularly laid out, and well built and paved. Most of its houses are of stone, roofed with slate. There are between 30 and 40 squares, or rather open spaces; the principal of which, the *Place Royale*, is surrounded by handsome shops, and, together with the *quartiers Graslin* and *Feydeau*, may be compared with the best parts of the capital.

The different parts of the city communicate by numerous bridges, several of which are handsome, and one, the *Pont de Pirmil*, 277 yards in length, has 16 arches. There are also two railway bridges over the Loire. The cathedral, though not imposing either without or within, has a front ornamented with good though mutilated sculptures, and flanked with two towers, 170 ft. high: in its interior is a magnificent marble tomb, erected by Anne of Brittany, in memory of her father Francis II., the last duke of that prov. No other church demands particular notice. The finest building in Nantes is the prefecture. It was erected between 1750 and 1777, and was formerly appropriated to the *Cour des Comptes*. It has two noble fronts of the Ionic order, a fine staircase, and several large halls and other good apartments: it is partly used as the depository of the departmental archives. The exchange is a large and convenient building, constructed chiefly within the present century; the theatre, in the *Place Graslin*, built in 1810, is, perhaps, the handsomest provincial theatre in France, after those of Bordeaux and Dijon. The town-hall was commenced in 1607, since which it has received several additions: it has three façades, ornamented with Corinthian pilasters, and over its principal front are sculptured figures, emblematical of the Loire and Sèvre. The *Palais de Justice*, commenced in 1844 and completed in 1853, is a handsome building, fronting the Place du Palais. The remaining public buildings include the mint, corn exchange, and linen hall; the *Hotel Dieu*, on the Isle Gloriette, erected in 1655, with 670 beds; the *Hospice du Sanitat*, or general infirmary and asylum, with 800 beds; the Hospital of Incurables; the Protestant church, formerly that of the Carmelites; mansion-house, chapter house, the large prison, public slaughter-house, barracks, college; the museum, with an excellent mineralogical collection; and the *Salorges*, a general depôt for merchandise.

Nantes is a bishop's see, the cap. of the 12th military division of the kingdom, the seat of a Lutheran consistory, of tribunals of primary jurisdiction and commerce, and a chamber of commerce; and is the residence of the consuls of many foreign powers. It has a royal college, an academical society, 2 episcopal seminaries, a public library with 30,000 printed vols., and many valuable MSS., collections of engravings, paintings, and an observatory, and botanic garden, schools of navigation, medicine, drawing, and riding, maternity and Protestant Bible societies, a savings' bank, a *mont de piété*, and a maritime insurance office.

Ships of 200 tons, in the ordinary state of the river, reach the city quays without difficulty; but vessels of a larger burden load and unload at the new port of St. Nazaire, about 40 m. lower down the river. But notwithstanding this disadvantage, the Loire, opposite the city, is crowded with inland craft, and vessels of all nations, but principally from N. Germany, Sweden, Denmark, and Russia. Nantes, Brest, Pontivy, Redon, and other towns in Brittany, communicate with each other by the canal from Nantes to Brest, which has an entire length of about 230 m.

The manufactures of the city are various, and on the increase. Coarse woollen-cloths and flannels, cambrics, printed cotton goods, handkerchiefs, tickings, and hosiery are made on a large scale, besides which there are extensive biscuit-baking

Digitized by Google

houses, chemical works, potteries, rope-walks, copper-foundries, manufactories of iron cables, cannon, and other stores, with breweries, distilleries, sugar-houses, tanyards, vinegar establishments, and ship-yards for the construction of merchant-ships, corvettes, and smaller vessels.

Nantes was formerly famous for her quick sailing vessels; but this is not the case at present. At Indret near Nantes, on an island towards the mouth of the Loire, the French government has founded an establishment for building steam-boats, which employed nearly 2,000 workmen in 1865. Large naval storehouses are established at Nantes, from which Brest, L'Orient, and Rochfort receive supplies of provisions and ammunition. Previously to the Revolution, the foreign trade of Nantes was much larger than at present; and during the time that the slave-trade was carried on, Nantes was more extensively engaged in it than any other French port. Now Marseilles, Havre, and Bordeaux rank above her as commercial cities; but she is still the emporium of all the rich and extensive country traversed by the Loire, and has a considerable import and export trade, particularly with the French W. Indies, S. America, and the different ports of Europe. The exports comprise all sorts of French produce, but principally brandy, wine, and vinegar, silk, woollen, and linen goods, refined sugar, wheat, rye, and ship biscuits. The chief imports are sugar, coffee, and other colonial products; cotton, indigo, timber, and hemp. Nantes is likewise a considerable entrepôt for the commerce of the salt made in the dép., chiefly at Noirmoutier and Croisic. (See LOIRE-INFÉRIEURE.) The customs' duties amounted to 27,683,890 francs in 1863. There arrived in the year 1863, at the port, 1,381 vessels, of 124,433 tons; and there cleared 1,033 vessels of 105,757 tons. The proportion of French tonnage was, among the arrivals, 104,191, and among the shipping which cleared, 59,799. The pilchard fishery is carried on with great activity, and employs, in the season, 700 boats, manned by about 3,000 seamen. Nantes has 2 weekly markets, and 12 yearly fairs, one of which, beginning May 25th, lasts 15 days.

The æra of the foundation of Nantes is unknown; but, before the conquest of Gaul by the Romans, it was already a considerable city, and the cap. of the *Namnetes*, who distinguished themselves by their opposition to Julius Cæsar. In 445 it was unsuccessfully besieged by the Huns, and, in the middle of the 9th century, was sacked by the Normans. In 992 it was added to the possessions of the dukes of Brittany, with whom it remained down to the union of that kingdom with France, by the marriage of Anne of Brittany to Louis XII. But Nantes is chiefly distinguished in history from the famous edict issued here in 1598 by Henry IV., and hence called the Edict of Nantes, which secured to the Protestants the free exercise of their religion, and an equal claim with the Catholics to all offices and dignities. The revocation of this edict by Louis XIV., in 1685, is the grand blot in his reign; and by occasioning the emigration of great numbers of his most industrious subjects, was even more injurious to the kingdom than the victories of Marlborough and Eugene.

During the revolutionary frenzy, Nantes was the scene of the atrocities of Carrier, the most sanguinary of the republican agents in the reign of terror. Nantes has produced numerous distinguished individuals, including Anne, duchess of Brittany; the Egyptian traveller, Caillaud; the physiologist, Laennec; and Fouché, minister of police. Near it is the Château de Buron, celebrated as having been long occupied by Mad. de Sevigné.

NANTUCKET, an island of the U. S. of America, state Massachusets, in the Atlantic, 26 m. SE. the peninsula of Cape Cod, the port of Nantucket, being in lat. 41° 16′ N., long. 70° 8′ W. Pop. 10,510 in 1860. It is of triangular shape, about 15 m. in length, and from 4 to 10 m. broad, with an area of 29,280 acres. The land, which was originally conveyed, in 1659, by the Earl of Stirling to nine proprietors, and by them divided into 27 shares, is a joint-stock property to the present day; but the number of shares has increased to 3,000 held among the inhab., most of whom belong to the Society of Friends. Little attention, however, is paid to agriculture, and both sheep and cows are fed on common pastures. The pop. is chiefly employed in the whale or other fisheries, and the seamen have acquired great celebrity for their enterprise, skill, and success.

The town of Nantucket is situated on the arm of a small bay on the NW. side of the island: it comprises about 1,000 houses, chiefly of wood, several places of worship, insurance companies, a woollen-cloth manufactory, and numerous spermaceti establishments. Its harbour is nearly landlocked, tolerably deep, and well protected from all winds: a lighthouse stands at its S. extremity.

NANTWICH, a market town and par. of England, co. Chester, and hund. of its own name, on the Weaver, crossed here by a stone bridge, 17½ m. SW. Chester, 146 m. WNW. London by road, and 161 m. by London and North Western railway. Pop. of town 6,225 and of par. 6,763 in 1861. It is situated in a luxuriant vale near the borders of Staffordshire and Shropshire, is irregularly laid out, and comprises 3 principal streets, badly paved and lined with mean-looking houses, uniting near the church, a very beautiful cruciform building of red sandstone, built in the early English style, and highly ornamental, with an octagonal tower rising from the intersection of the nave and transepts. There are likewise several places of worship for Dissenters, with attached Sunday schools. Two endowed day schools are attended by about 130 children; and there are several alms-houses, besides minor charities. A market-house and town-hall were built in the last century. Nantwich formerly owed its prosperity to the abundance of its salt springs; but only one spring is now worked, and nearly the whole trade has been removed to other places. Large quantities of excellent cheese are made in the town and its fertile neighbourhood; besides which, the manufacture of shoes for the London market forms an important branch of industry. Cotton goods, also, are made here in considerable quantities; and the glove trade is carried on to some extent. Great facilities of intercourse are furnished by the Birmingham and Liverpool, as well as by the Chester and Ellesmere, canals; and the Grand Junction Canal passes at only a few miles' distance. Markets on Saturday; and fairs, May 15, June 13, Sept. 4, and Dec. 4, 18, 19.

Nantwich, mentioned in Domesday simply as 'Wich,' was the scene, in 1069, of an unsuccessful attempt by the Cheshiremen to resist the advance of the Normans. In 1438 and 1583, the town suffered considerably from fire; and, during the parliamentary wars, it was besieged by the royalists under Lord Byron, but soon afterwards relieved by Sir Thomas Fairfax. It also deserves notice, from having been the birthplace of General Harrison, one of the regicides, and of Milton's widow, who died here in 1726.

NAPLES (an. *Parthenope* and *Neapolis*), a famous city and sea-port of Italy, cap. of the former kingdom of the Two Sicilies, and of the present prov. of Naples, on the N. side of the bay or gulf of Naples, 118 m. SE. Rome, with which

Digitized by Google

it is connected by railway. Pop. 417,463 in 1862. The situation of Naples is one of the finest that can be imagined. Seated partly on the declivity of a hill, and partly on the margin of a spacious bay, it spreads its buildings along the shore, and covers the shelving coasts and adjacent eminences with its villas and gardens. Its suburbs stretch in a magnificent and lengthened sweep, from Portici on the E. to the promontory of Misenum on the W. The bay is extensive, and presents an almost unrivalled assemblage of picturesque and beautiful scenery. On its NW. side, the shores of Pozzuoli rise in a gentle swell from the surface of the water; while, on the E., Vesuvius, with its verdant sides and black smoking summit, bounds the prospect: the centre contains the city, with its palaces, churches, and gardens, rising one above the other, backed by the heights on which are the royal palac of Capo di Monte, the observatory, and the Castle of St. Elmo. The view from the city seawards commands the whole sweep of the bay, bounded on the S. by the promontory of Sorrentum, and having near its mouth the island of Capri Ischia. The clearness of the atmosphere, and the mildness of the climate, complete the gratification inspired by the scene, and justify the epithet of *mitis* given to the city by the ancients. The city has an oblong form; but, when viewed from an elevated position, such as the Carthusian monastery, the castle of St. Elmo. or the church of Santa Maria del Parto, it appears irregular, the surrounding country being so studded with houses and villages, that it is impracticable to mark the line of separation between the town and the environs.

But it is principally in respect of its situation that Naples is superior to most other cities. The streets, indeed, are generally straight and well paved, though without footpaths; but they are universally narrow, and being bordered by lofty houses, have a dark gloomy appearance, that contrasts singularly with the splendour of the surrounding country. The Strada di Toledo, the principal street, having at the one end the Piazza di Mercato, and on the other the royal palace, runs N. and S. for about a mile; but it is only from 40 to 60 ft. in width, while the houses on either side are from 5 to 7 stories in height. Few of the other streets are more than 30 ft. in width, and many not more than from 15 to 20 ft., and some not so much. The houses are flat-roofed, and covered with a kind of stucco made of Pozzolana sand, which becomes indurated on exposure to the atmosphere. Most of them have balconies in front; and these, and the booths and stalls with which the streets are constantly occupied, make them look narrower than they really are. There are several open spaces or *larghi*, for they cannot be called squares; but they are very irregular both in aspect and plan. The principal are the Largo di Castello, the Largo di Palazzo, and the Piazza di Mercato. Some of the *larghi* are decorated with fountains and obelisks; and the city is, on the whole, well supplied with water.

The houses in Naples bear no analogy to those in London, but correspond pretty closely to those of Paris, except that they are generally on a larger scale. 'You see,' says Mr. Maclaren (Notes, p. 51) 'a vast tenement, with a front as long as that of Edinburgh College, but two stories higher —a *grande porte*, as large as the college gate, and decorated, too, with columns. This porte opens into a court as long as the building, but perhaps only 30 or 40 ft. wide. The tenement, in fact, forms a parallelogram, built all round the court, with wide spacious stairs in each of its interior fronts. The whole of the ground-story externally consists of a series of arched cells, probably 10 ft. wide, 12 ft. high, and 15 or 20 ft. deep. These are occupied as sale shops, cafés, and workshops. The door is always in three high and narrow divisions; in cold or wet weather the middle only is opened, in mild weather all the three are folded back, and the business is carried on in the open air. In cell No. 1, for instance, you have an oil-shop; in No. 2, tripe, sausages, &c.; in No. 3, cloth of some kind; in No. 4, sacks of flour; in No. 5, a coppersmith hammering away; in No. 6, you see half a dozen tailors stitching; in No. 7, you find a confectioner, who is kneading the dough on his counter; in No. 8, a modiste, or dealer in women's dresses; in No. 9, a carpenter; in No. 10, a bookseller; in No. 11, a watchmaker. The cells are all of the same shape and size, and not one front only, but often all the four external fronts of the building are thus arranged and occupied. Such a building is called a *palazzo*, which does not mean a palace, but simply a house, or, rather, a tenement, in the ground-story of which a crowd of shopkeepers and artisans carry on their business, and in the upper part a crowd of other persons live. Naples is almost entirely composed of palazzos, great or small, such as I have described, and they are crowded together amazingly. The ground may be said to bear a crop of houses, as a field bears a crop of corn; for gardens, or open plots of ground for drying clothes, or securing the advantages of light and air, are never dreamed of here, except as appendages to villas in the suburbs. In one thing Naples is magnificent—its street pavement, which invariably consists of squared blocks of lava, joined as closely and correctly as the flags of our foot pavement. They are said to be laid in mortar, as the old Roman roads were, and hence may be considered as built roads. So firm is the work, that you never see one block an inch higher or lower than another.'

Naples has but little architectural magnificence. The prevailing taste, if a series of absurd fashions deserve that name, has always been bad. Moresco, Spanish, and Roman, corrupted and intermingled together, destroy all appearance of unity and symmetry, and form a monstrous jumble of discordance. Hence the magnificence of the churches and palaces consists principally in their magnitude, and their paintings, marbles, and other decorations. The cathedral, built on or near the site of a temple of Apollo, a large Gothic edifice, is overcharged with ornaments in the most discordant style. It is supported by more than 100 granite columns, which originally belonged to the edifice it has replaced. In the subterranean chapel, under the choir, is the body of St. Gennaro, the tutelary saint of Naples, whose blood, carefully preserved in a crystal vase, and miraculously liquefied three times a year, is regarded by the orthodox Neapolitans as the boast of the cathedral, and the great glory and honour of the city. The Santi Apostoli, erected on the ruins of a temple of Mercury, is perhaps the most ancient church in the city, having, it is alleged, been originally erected by Constantine, but subsequently rebuilt with greater magnificence. The churches of St. Paul, St. Filippo Neri, Spirito Santo, and S. Martino, are all well deserving of attention; the latter, indeed, is said to be the most splendid and beautiful church in the city. The church Del Parto, though inferior to most others in size and decorations, deserves notice from the fact of its having been erected and dedicated to the *Virgini parienti*, by Sannazarius, author of the famous Latin poem *De Partu Virginis*. It contains the remains of its illustrious founder, a native of the city, where he expired in 1530, inclosed in a

Digitized by Google

magnificent tomb, with the following distich by Bembo:—

'Da sacræ cineri flores: hic ille Maroni
Sincerus musa proximus, ut tumulo.'

In all there are said to be about 200 churches in the city, and the priests compose a large part of the pop.

The Neapolitans appear to entertain the most perfect indifference as to the manner in which their mortal remains are disposed of. The great burying-place of the city lies alongside the splendid road leading to the *Campo Marzio*. It consists of 365 deep cells, dug into the pozzolana of which the hill is composed. One of these cells is opened in rotation every morning, and receives all the dead bodies of the day, brought in carts, and tumbled into it, like as much rubbish; this done, it is shut up again for a year, and is then opened to receive a fresh supply of carcases. But, exclusive of this vast Golgotha, a considerable number of funerals take place in churches.

The palaces and mansions of the nobility, like the churches, have little pretensions to purity of architecture; and though in many the apartments are on a grand scale, they are in general too much loaded with ornaments. The royal palace (*Palazzo reale*) in the city, near the quay, at the S. extremity of the Strada di Toledo, though a part only of the original design, is a vast building, 3 stories in height, with 4 interior courts: the first story is of the Doric, the second the Ionic, and the third the Corinthian order of architecture. Its interior is splendidly fitted up, and it has some good paintings. Another royal residence, the Capo di Monte, finely situated on an eminence outside the town, on the N., commands a magnificent view. This palace is now united to the city by a magnificent road, constructed by the French, and called, during their ascendancy, the Strada di Napoleone. The old palace of the Neapolitan monarchs is now occupied by courts of justice.

The *Palazzo degli Studii Publici*, erected in the early part of the 17th century, from designs by Fontana, is by far the most interesting building in Naples. It was intended for the university, and was used as such from 1616, when it was completed, down to 1790, when the university was removed to the convent of Gesu-Vecchio, and the Palazzo degli Studii was converted into a great national museum, the *Museo Borbonico*. In addition to a noble library, comprising about 150,000 vols., and many MSS., this museum contains a matchless collection of bronzes, gems, paintings, household furniture, papyri, and Etruscan vases, from Herculaneum, Pompeii, Stabiæ, Nola, Capua, and other ancient cities; and, in addition to these treasures, which are, in all respects, unique and unrivalled, it contains, exclusive of others, most of the statues and pictures formerly comprised in the Farnese palace at Rome, brought thither when a former king of Naples succeeded to the rich inheritance of that family. The collection of statues is, in fact, inferior only to those of the Vatican and the gallery at Florence, while in paintings it yields only to Rome, Florence, and Bologna.

The university of Naples, founded in 1224, has above 1,500 students. It is presided over by a rector, and divided into faculties, under deans, who, with the professors, receive very inadequate salaries from the crown. There are, besides the university, many superior, as well as inferior, schools. Naples has a *Società Reale*, or Royal Society, divided into the three sections of the fine arts, science, and archæology; and other literary and scientific associations; a military and naval college; a royal medical college, a veterinary do., a royal college of music; a fine botanical garden, constructed by the French, and an observatory, in an elevated situation to the N. of the city. One of the most curious institutions in Naples is a school where natives of China are instructed in the principles of Christianity, and qualified to act as missionaries.

Naples has numerous and some very extensive establishments for the support and relief of the poor, including a school for the deaf and dumb, and an asylum for the blind. The two principal hospitals are those of *Degl' Incurabili* and *Dell' Annunziata*: the former, notwithstanding its name, is open to the sick of all descriptions, and has a revenue of about 300,000 duc. a year. The latter is destined to receive foundlings and penitent females. The *Reclusorio*, or *Albergo de' Poveri*, is an immense workhouse, or rather asylum for the destitute poor who are able to work, and for orphans and poor children of both sexes, who are lodged and educated. The hospital of San Gennaro, near the hill of Capo-di-Monte, is intended for the reception of infirm and aged poor, or poor unable to work. But, despite its hospitals, such is the want of industry, and the defect of the police, that there probably is no other city whose streets are infested by so large a proportion of poor, miserable, wretched mendicants.

Naples has 6 or 7 theatres. That of San Carlo, the largest and finest in Italy, was nearly burnt down in 1815; but it was soon after repaired, and re-opened with more than its original splendour. Among the minor theatres, 2 or 3 are wholly devoted to the exhibition of Pulcinella, or Punch, who is here seen in his glory. 'What,' exclaims an English traveller, 'is a drama in Naples without Punch? or what is Punch out of Naples? Here, in his native tongue, and among his own countrymen, Punch is a person of real power; he dresses up and retails all the drolleries of the day; he is the channel, and sometimes the source, of the passing opinions; he can inflict ridicule, he could gain a mob, or keep the whole kingdom in good humour. Such was De Fiori, the Aristophanes of his nation, immortal in buffoonery.'

The finest promenade of Naples is that called the Chiaja, extending along the shore from the Castello dell' Ovo, E. to Virgil's tomb and the hill of Pausilippo: it is in part planted and ornamented with statues and fountains, and is, altogether, one of the finest public walks that is any where to be met with. The mole also is a favourite promenade, and the quays that stretch E. from it towards Portici.

A vast number of employments must necessarily be carried on in so great a city; but there are few manufacturing establishments on anything like a large scale. Some woollen, silk, and linen stuffs are, however, produced; as are hats, gloves, earthenware, and jewellery. The preparation of maccaroni may, however, be said to be the distinguishing business of Naples. It forms the principal food of the bulk of the population, and is, therefore, largely produced. The best maccaroni is made of the flour of the hard wheat (*Grano duro*) brought from the Black Sea. Being mixed with water, it is kneaded by means of heavy wooden blocks wrought by levers, till it acquires a sufficient degree of tenacity; it is then forced, by simple pressure, through a number of holes, so contrived that it is formed into hollow cylinders. The name given to the tubes depends on their diameter; those of the largest size being maccaroni, the next to them vermicelli, and the smallest fedelini. When properly prepared and boiled to a nicety, Neapolitan maccaroni assumes a greenish tinge.

Digitized by Google

The Lazzaroni pique themselves on the dexterity with which they swallow long strings of maccaroni and vermicelli without breaking them.

Commerce.—The harbour of Naples is formed by a mole projecting from the centre of the city, nearly in the form of the letter L, having a light-house on its elbow. Immediately within the mole there are from 3 to 4 fathoms water, the ground being soft, but only small vessels can approach the town. The water in the bay is deep, and there is no bar; but it is a good deal exposed to the south-westerly winds, and to guard against their influence, vessels in the bay moor with open hawse in that direction. The subjoined tables give—after returns of Mr. Bonham, British consul-general—the total value of the principal imports and exports at and from Naples, in each of the years 1862 and 1863:—

VALUE OF PRINCIPAL IMPORTS.

Names of Articles	1862	1863
	£	£
Coffee	137,591	144,350
Cotton Yarn, not dyed	536,440	164,689
American Hides	98,635	134,276
Iron, of all kinds	75,522	792,191
Indigo	7,085	12,566
Grain	18,281	13,675
Millinery	174,864	13,594
Worked Glass	27,387	32,531
,, Gold	49,884	41,407
Textiles of Cotton and White Muslin	126,924	360,518
,, Wool Cloth, &c.	590,500	262,741
,, Silk	174,400	151,816
,, Mixed	42,200	42,812
Rum	32,628	31,802
Sugar	367,952	704,207
Salt Fish	214,500	258,600

VALUE OF PRINCIPAL EXPORTS.

Names of Articles	1862	1863
	£	£
Wool	28,840	22,588
Olive Oil	433,485	20,941
Grain	118,986	7,754
Liquorice	74,242	69,065
Tartars	69,940	72,313
Almonds	70,707	42,532
Madders	339,728	334,033
Linseed	14,342	13,200
Raw Silk	281,750	364,915
Worked ditto	15,050	4,362

The subjoined table gives the number and tonnage of British vessels which entered the port of Naples in each of the years 1861 to 1863:—

	No. of Vessels	Tonnage
In 1861—		
Steamers	102	70,426
Sailing	136	26,416
Total	238	96,842
In 1862—		
Steamers	119	95,292
Sailing	220	39,678
Total	339	134,970
In 1863—		
Steamers	153	117,789
Sailing	211	37,313
Total	364	155,102

The principal merchants of Naples are all, more or less, bankers, inasmuch as they advance money on letters of credit, and deal in foreign exchange, and other financial operations. Goods are universally sold at long credits, mostly from 4 to 8 months, and for manufactured goods sometimes longer. Discount for ready money is at the rate of 6 per cent. per annum.

Society in Naples has undergone many considerable changes during the present century: but its distinguishing features have not materially varied for a lengthened period, and Goldsmith's picture of Italian manners is still more applicable to this than to any other portion of the peninsula:—

> But small the bliss that sense alone bestows,
> And sensual bliss is all the nation knows.
> In florid beauty groves and fields appear,
> Man seems the only growth that dwindles here.
> Contrasted faults through all his manners reign;
> Though poor, luxurious; though submissive, vain;
> Though grave, yet trifling; zealous, yet untrue;
> And even in penance planning sins anew.

The nobility are exceedingly numerous, and are as fond as ever of splendour and parade. Previously to the occupation of the country by the French, the greater number of them were very poor; and the changes introduced in 1806, and the subdivision of property that has taken place in the interval, have considerably reduced the fortunes of those who had formerly large estates. 'Titles are here so common that you find at every corner Principi or de Principi without a virtue or a ducat.' The rage for carriages and equipages is as great at this moment as it was in the days of Dr. Moore: 'Women at all above the lower ranks do not walk; those who cannot afford a carriage are doomed by pride to perpetual imprisonment in their own houses, or only go to church with one or two poor devils hired for the occasion, who put on antiquated livery, and carry a book or a cushion. I am told that husbands sometimes perform the office, trusting probably that they shall escape recognition under the disguise of a footman, and choosing to gratify vanity at the expense of pride. The roofs of the houses, which are flat and adorned with flowers and shrubs in boxes, afford air and exercise to the women. Thus living in idle retirement, their mind is exclusively bent on the means of procuring a lover; and the tales of Boccaccio and Lafontaine convey a likeness of their moral habits and manners.'

The *lazzaroni*, so prominent in the descriptions of Naples, formerly included most part of the lower classes, comprising street porters, hawkers, water-carriers, boatmen, hackney-coachmen, and mendicants. Their numbers were loosely estimated at from 30,000 to 40,000, and they were said to constitute a distinct race, immersed in poverty, only half-clothed and not half-fed, without lodgings, and sleeping in the open air in the porches of churches and other public buildings. But it is now admitted that the lazzaroni, properly so-called, or the houseless poor, are merely the dregs of the population, and that they owe their gipsy-like complexion and cast of features to their constant exposure to the sun and air. It is singular that wretches in so destitute a condition, and frequently involved in all but the extremity of want, should, speaking generally, be remarkable for their fine symmetrical and muscular forms, and be distinguished by their vivacity and humour. Great efforts have been made for many years past to lessen the numbers of the lazzaroni; and, under Murat, many of them were drafted into the army. But they are still extremely numerous, and crowds of these half-clothed wretches (lazzaroni) may be seen asleep,

Digitized by Google

in sunny days, on the pavement of the Chiaja. It is said there are individuals among them who do not know their own names, and who go to the priest and confess anonymously, owning sins of whose designation in the decalogue they are ignorant. Unless when pressed by hunger, or under some peculiar and extraordinary excitement, the lazzaroni are neither turbulent nor licentious; but on such occasions they evince all the sanguinary ferocity of savages. They seem, however, to be wholly incapable of any vigorous or long-continued exertion for any public purpose, and may, speaking generally, be regarded as submissive, docile slaves.

Lottery offices are extremely numerous in Naples, and have, as might be expected, a most injurious operation. Tickets are so subdivided, that shares may be purchased for about 2*d.*: the moral pestilence consequently descends to the very lowest ranks, and even the lazzaroni are speculators. There are, probably, a greater number of pick-pockets in Naples than in any other city; and deceit and falsehood are so common as hardly to excite attention. The *donne libere* are also extremely numerous.

Owing, principally, no doubt, to its mild climate, a large proportion of the pop. of Naples may be said to inhabit the streets, and to carry on their business out of doors; and the competition arising among parties so situated, has probably given rise to that universal turmoil and effort to attract notice, that is at once so grotesque and so disgusting to a stranger.

'Naples,' says a humorous English traveller, Mr. Forsyth, 'in its interior, has no parallel on earth. The crowd of London is uniform and unintelligible: it is a double line in quick motion; it is the crowd of business. The crowd of Naples consists in a general tide, rolling up and down; and in the middle of this tide, a hundred eddies of men. Here you are swept on by the current, there you are wheeled round by the vortex.

> "Qui vid' io gente più che altrove troppa,
> E d'una parte e d'altra, con gran' urli,
> Percuotevans' incontro . . ." Dante.

'A diversity of trades dispute with you the streets. You are stopped by a carpenter's bench, you are lost among shoemakers' stools, you dash among the pots of a *maccaroni* stall, and you escape behind a *lazzaroni's* night-basket. In this region of caricature, every bargain sounds like a battle: the popular exhibitions are full of the grotesque: some of their church processions would frighten a war-horse. The mole seems, on holydays, an epitome of the town, and exhibits most of its humours. Here stands a methodistical friar preaching to one row of *lazzaroni;* there, Punch, the representative of the nation, holds forth to a crowd. Yonder, another orator recounts the miracles performed by a sacred wax-work, on which he rubs his *agnuses*, and sells them, thus impregnated with grace, for a grain a piece. Beyond him are quacks in hussar uniforms, exalting their drugs and brandishing their sabres, as if not content with one mode of killing. The next *professore* is a dog of knowledge, great in his own little circle of admirers. Opposite to him stand two jocund old men, in the centres of an oval group, singing alternately to their crazy guitars. Further on is a motley audience, seated on planks, and listening to a tragi-comic *filosofo*, who reads, sings, and gesticulates old Gothic tales of Orlando and his Paladins.

'If Naples be "a paradise filled by devils," I am sure it is by merry devils. Even the lowest class enjoy every blessing that can make the animal happy—a delicious climate, high spirits, a facility of satisfying every appetite, a conscience which gives no pain, a convenient ignorance of their duty, and a church which ensures heaven to every ruffian that has faith. Here tatters are not misery, for the climate requires little covering; filth is not misery to them who are born to it; and a few fingerings of maccaroni can wind up the rattling machine for the day. They are, perhaps, the only people on earth that do not pretend to virtue. On their own stage they suffer the Neapolitan of the drama to be always a rogue. If detected in theft, a lazzaroni will ask you, with impudent surprise, how you could possibly expect a poor man to be an angel. Yet what are these wretches? Why, men whose persons might stand as models to a sculptor; whose gestures strike you with the commanding energy of a savage; whose language, gaping and broad as it is, when kindled by passion, bursts into oriental metaphor; whose ideas are cooped, indeed, within a narrow circle—but a circle in which they are invincible. If you attack them there, you are beaten. Their exertion of soul, their humour, their fancy, their quickness of argument, their address at flattery, their rapidity of utterance, their pantomime and grimace, none can resist but a lazzaroni himself. These gifts of nature are left to luxuriate unrepressed by education, by any notions of honesty, or habits of labour. Hence their ingenuity is wasted in crooked little views. Intent on the piddling game of cheating only for their own day, they let the great chance lately go by, and left a few immortal patriots to stake their all for posterity, and lose it.'

'The people,' says another traveller, M. Simond, 'seem, in general, peaceful and contented, unconscious of want at least; they consume little, and that little is cheap. For three grains a day (three halfpence sterling) a man has his fill of maccaroni, and for three grains more he may have his frittasa (very good fish or vegetables fried in oil) at any of the innumerable stands of itinerant cooks about the streets, which is not the only luxury of the gastronomic kind within his reach. A glass of ice-water costs one-sixth of a grain (one-twelfth part of a penny sterling), and, if properly seasoned with lime-juice and sugar, two grains. The price of these things is kept down by government, ice or hardened snow being abundantly supplied at the public expense from natural ice-houses, in certain cavernous rocks above Stabiæ and Sorrento, and even on Vesuvius. The ice in baskets is made to slide down the mountain, along light ropes, into boats, which sail across the bay during the night, and land their precarious cargoes before day. The lower people have clubs, where they assemble twenty or thirty together, and contribute each one grain for wine of an evening. They elect a president and vice-president. The president calls upon one of the members to drink a glass of wine filled by the vice-president; but when the member challenged is about to take it, the vice-president has the right to say, I take it for myself, and actually drink it to his health; a standing joke, which he may repeat as long as he pleases, or as long as he can, but which the disappointed expectant, who has the laugh of the company against him, does not always relish, and in the end there is sometimes fighting and stabbing.'

The country round Naples is the most beautiful that can well be imagined, and is peculiarly interesting from its classical associations. Virgil was buried in the immediate vicinity of the city; and the ruins of an ancient mausoleum on the left hand side of the road, leading from the prome-

Digitized by Google

nade of Chiaja to the grotto of Pausilippo, is said to have contained the remains of the prince of Latin poets. There is, however, no really good foundation for this statement.

The grotto of Pausilippo, now alluded to, is a tunnel cut through the hill of that name, being a part of the road from Naples to Pozzuoli. It is about two-thirds of a mile in length, 60 ft. in height, and broad enough to serve for a highway. This work is of great, but unknown, antiquity. Seneca, in his 57th epistle, complains bitterly of its length, darkness, and dust. ('*Nihil illo carcere longius, nihil illis faucibus obscurius; etiam si locus haberet lucem, pulvis auferret.*') Its dimensions were, however, enlarged in 1557; and it is now well paved and lighted with lamps by day as well as by night. (For further information as to the environs of Naples, see the articles Baiæ, Herculaneum, Pompeii, Pozzuoli, and Vesuvius, in this work.)

Historical Notice.—Naples is very ancient. It was founded by the people of Cumæ, a colony from Greece, who gradually spread themselves round the Bay of Naples, and was called from this circumstance Neapolis, or the new city. It was also called Parthenope, from its being the burying-place of one of the sirens of that name. (Velleius Paterculus, lib. i. cap. 4; Strabo, lib. x.) It was therefore, to all intents and purposes, a Greek city; its inhab. spoke the Greek language, and were long distinguished by their attachment to the manners and customs of their ancestors. It was on this account, according to Tacitus, that it was selected by Nero to make his *début* on the stage; such a proceeding being less offensive there, and less repugnant to the prevailing sentiments, than in Rome. (Taciti Hist., lib. xv. cap. 33.) Naples, in truth, was then, as now, a chosen seat of pleasure. Its hot baths were reckoned equal to those of Baiæ; and the number and excellence of its theatres and other places of amusement, its matchless scenery, the mildness of the climate, and the luxury and effeminacy of the inhab., made it a favourite retreat of the wealthy and luxurious Romans, and justifies Ovid in calling it *in otia natam Parthenopen*. After the fall of the Roman empire, it underwent many vicissitudes. It, however, early became the cap. of the modern kingdom of Naples; and, notwithstanding the calamities it has suffered from war and earthquakes, it has long been the most populous city of Italy, and one of the most interesting in the world.

NARBONNE (an. *Narbo Martius*), an ancient city of France, dép. Aude, about 4 m. S. from the Aude, and 7 or 8 m. from the Mediterranean, on the railway from Montpellier to Perpignan, 52 m. SW. Montpellier, and 34 m. N. by E. Perpignan. Pop. 16,062 in 1861. The city stands in a fine plain, and is surrounded by a wall flanked with towers, and entered by four gates. Streets narrow and tortuous, and houses mean and ill-built. It is divided by the canal into two nearly equal parts, *la Bourg* and *la Ville*, connected by three bridges; and is plentifully supplied with water by numerous fountains connected with springs outside the walls. The esplanade, or *Place des Barques*, in the centre of the town, is a fine open space; but its beauty is much impaired by the almost total absence of vegetation. Other promenades are formed near the gates; on the banks of the canal is a fine public walk, planted with trees, and the environs generally are extremely beautiful. Narbonne has few buildings worthy of notice, except the cathedral and archbishop's palace. The former, built in the 13th and 14th centuries, is one of the finest specimens of Gothic architecture in Europe: the choir, however, is the only part complete, the nave, commenced in 1708, being unfinished. Two towers rise from its W. end, but they are deficient in that lightness and elegance observable in similar structures of the same æra. The archbishop's palace (celebrated in history, as having been the place where Louis XIII. signed the order for the trial of De Thou and Cinq. Mars) is an ancient castellated building in the Place des Barques, having attached to it a massive square tower, built in the Middle Ages. In the front court are the remains of a marble altar, erected by the Narbonnese to Augustus Cæsar, and, in the garden, a fine tomb of white marble. The two par. churches are ancient and massive structures, but built in very bad taste, and remarkable only for some curious sculptures. The other chief buildings are three hospitals, the exchange, arsenal, barracks, prison, a museum, theatre, and public baths. Narbonne is the seat of a tribunal of original jurisdiction and commerce, and has some silk filatures, fabrics of coarse linen cloth, worsted caps, and paper, with numerous distilleries, potteries, chemical works, and tan-yards. It is the centre of the wine and spirit trade of the dép., and the principal support of its inhabitants is derived from its trade in wine, corn, brandy, silk, oil, salt (obtained from the neighbouring lagoons), wax and honey, which it exports, partly to Bordeaux, by the Canal du Midi, and partly to Marseilles and other markets on the Mediterranean, by its port of La Nouvelle, at the mouth of the canal on which it is built.

The honey of Narbonne is said to be the finest in the world. Its peculiar excellence is said to be owing to the variety of nourishment for the bees. The hives are moved from one place to another. From the gardens of Narbonne they are carried to the meadows in the neighbourhood, and they are afterwards conveyed 30 or 40 m., as far as the low Pyrenees, so that the treasures of the gardens, meadows, and mountains are all rifled to produce the honey of Narbonne. It is of a much higher flavour than any other honey. Fruit is extremely abundant and cheap. The wages of labour do not exceed a franc a day, but the necessaries of life are obtained at the same easy rate. The dress of the peasantry in the neighbourhood bears a striking resemblance to that worn by the Catalonians. The neighbourhood is fertile in corn, but is rendered unhealthy in summer by the salt lagoons fringing the shores of the Mediterranean. There are numerous salt-pans, and marble is quarried near the town.

Narbo, one of the most ancient towns of Gaul, and the chief city of the Volcæ Arecomici, was formed into a Roman colony *anno* 116 B.C.; Julius Cæsar further enlarged it by sending thither the veterans of the tenth legion; and Cicero (Or. pro M. Fonteio, c. 1.) terms it '*colonia nostrorum civium, specula populi Romani ac propugnaculum.*' At the distribution of Gaul into provinces by Augustus it gave its name to the SW. province, called *Narbonensis*. Mela speaks of it as a place '*unde olim terris auxilium nunc et nomen et decus est,*' and Strabo designates it as the emporium of all Gaul. Its public buildings and great commercial wealth are mentioned by other authors; but the present remains of its ancient grandeur are confined to a few fragments and inscriptions, chiefly incorporated in the walls of the town. It fell into the hands of the Visigoths, A.D. 462, and was shortly after made the cap. of their kingdom. In 720 it was taken by the Saracens, and by Pepin-le-Bref in 759; after many vicissitudes it was finally annexed to the crown of France in the early part of the 16th century. Its ancient walls were demo-

Digitized by Google

lished by Simon de Montfort during the wars against the Albigenses: those by which it is now surrounded having been constructed, considerably within the limits of the old walls, by Francis I. It has, at different times, suffered severely from the plague. In the wars of the League, Narbonne embraced the cause of the Huguenots, but in 1591 it submitted to Henry IV.

NARDO (an. *Neritum*), a town of South Italy, prov. Lecce, cap. cant., on the road from Lecce to Gallipoli, 16 m. SSW. the former, and 10 m. NNE. the latter, city. Pop. 10,971 in 1862. Nardo is a substantial, flourishing town, neatly built, and well paved. It is a bishop's see, and has numerous churches, a hospital, and manufactures of cotton goods, the raw material of which is grown in its vicinity. It was a place of some note in antiquity as a city of the Salentines, and was held in esteem as a seminary of learning as late as the middle of the 15th century.

NARNI (an. *Nequinum* and *Narnia*), a town of Central Italy, prov. Perugia, on a lofty eminence, at the foot of which flows the Nera (an. *Nar*). 44 m. N. by E. Rome. Pop. 8,124 in 1862. The town has nothing but its antiquity and picturesque appearance to recommend it; it is badly built, with steep and narrow streets, and exhibits every mark of poverty and decay. It has a cathedral, several other churches, numerous convents, a modern aqueduct, which supplies several public fountains, and the ruins of an amphitheatre. But it is principally celebrated for the remains of a noble bridge thrown by Augustus over the Nar, constructed after the Etruscan method, of large blocks of marble without cement: it is supposed to have been originally upwards of 630 ft. in length. Only one of the arches remains perfect, the span of which is above 60 ft.: the piers supporting it are 28 ft. in breadth. Addison styles this bridge 'one of the stateliest ruins in Italy;' and few relics of antiquity are better adapted to impress the mind with high ideas of Roman magnificence. Narni was the birthplace of the Emperor Nerva.

NARO (supposed to be the an. *Motyum*), a town of Italy, island of Sicily, intend. Girgenti, cap. cant., on the Naro (an. *Hypsa*), 13 m. E. by S. Girgenti, and 21 SW. Caltanisetta. Pop. 10,620 in 1862. The town is situated on an eminence, surrounded by picturesque valleys and glens; has a royal college, and a house of refuge, and some trade in oil, wine, and sulphur, which last is very abundant in its vicinity. Many sepulchres, medals, and other vestiges of antiquity have been found here.

NARRAINGUNGE, a considerable trading town of British India, prov. Bengal, distr. Dacca Jelalpore, on a branch of the Brahmaputra, 8 m. SE. Dacca. Lat. 23° 37′ N.; long. 90° 35′ E. Pop. estimated at 15,000. The inhabitants carry on a large trade in salt, grain, tobacco, and lime; and the town exhibits a scene of bustle and activity seldom witnessed in a community of Bengalese. The banks of the river are studded with indigo factories, and the remains of forts erected to repel former invasions of the Arracanese.

NARVA, a town of European Russia, gov. of Petersburg, on the Narova, about 8 m. from its mouth, and 81 m. WSW. St. Petersburg. Pop. 7,255 in 1858. The town is divided into an old and more recent part; the latter, placed on high ground, is surrounded with fortifications in a good state of repair, and consists of respectable stone houses; the lower and older part comprising only a few wooden tenements, with two churches, one of which belongs to the Greek, the other to the Lutheran, religion. Three other churches, a town-hall, exchange, and the half-ruinous fortress of Ivangorod (built in 1492, by the Czar Ivan III. Vassilievitch), are the only other public edifices. The place is noted for the famous battle fought in its vicinity, on the 30th of November, 1700; when Charles XII., king of Sweden, at the head of only 8,000 men, attacked and forced the entrenched camp of the Russian army, consisting of about 80,000 men, which had been besieging Narva. The Swedes gained a complete victory. Above 18,000 Russians were killed in their intrenchments, besides a great number drowned in the river: next day above 30,000 Russian troops surrendered to the Swedes, by whom they were disarmed and dismissed. This extraordinary success did not cost the Swedes above 600 men. On hearing of this disaster, the czar, Peter the Great, said, '*Je sais bien que les Suédois nous battront longtemps; mais à la fin ils nous apprendront eux-mêmes à les vaincre*:' and the event proved that he was in the right. (Voltaire, Histoire de Charles XII, liv. ii.)

NASEBY, a decayed market-town and par. of England, co. Northampton, hund. Guilsborough, 11½ m. NNW. Northampton, and 72 m. NW. London. Pop. of par. 811 in 1861. Area of par. 3,690 acres. This village formerly possessed a market and a worsted manufactory, but they have long ceased to exist; the market cross, in the centre of the village, is the only extant sign of its past importance.

But, how unimportant soever in other respects, Naseby will be ever memorable in British history for the battle fought near it on the 14th of June, 1645, between the royalists under Charles I. and the parliamentary army commanded by Cromwell and Fairfax. The action was obstinate and well-contested, but in the end the parliamentary leaders gained a complete and decisive victory. The loss in killed on both sides was nearly equal; but the republicans took 500 officers and 4,000 soldiers, and all the king's artillery and ammunition. This action may be said to have terminated the civil war.

NASHVILLE, a town of the U. States of N. America, state Tennessee, of which it is the cap., on the Cumberland, 155 S. by W. Louisville. Pop. 16,980 in 1860. The town is situated on the S. bank of the river, adjacent to fine bluffs, and is well built, with wide and regular streets; comprising, besides some elegant private dwellings, a court-house, lunatic asylum, penitentiary on the Auburn plan, the halls of the university, U. States branch bank, market-house, with hotels and churches. The town has an active and extensive trade, and there are brass and iron foundries, rolling mills and tanneries. Steam boats come up to the town, but the navigation, so far as respects the Ohio and Mississippi, only lasts for about eight months of the year, as during the dry season the boats cannot descend from the mouth of the Cumberland to that of the Ohio. The university of Nashville, founded in 1806, has seven professors, and is attended by above 100 students: the library comprises 9,500 vols. There is also a lyceum.

NASO (an. *Agathyrnum*), a town of Italy, island of Sicily, prov. Messina, cap. cant., on the Naso, near its mouth, in the Mediterranean, 10 m. W. by S. Palti. Pop. 7,291 in 1862. The town is situated on a hill, in a finely wooded and healthy neighbourhood; is walled, and has some handsome buildings.

NASSAU (DUCHY OF), a state of W. Germany, principally between lat. 50° and 51° N., and long. 7° 32′ and 8° 45′ E.; having N. and W. Rhenish Prussia, S. Hesse-Darmstadt, and E. the latter, Hesse Cassel, the territ. of Frankfort, and

Digitized by Google

the Prussian circle of Wetzlar. Length, N. to S., 55 m.; average breadth, above 33 m. Area, 1,802 sq. m.; pop. 457,571 in 1861. Almost the whole of the surface is hilly, with a general slope towards the W. The Taunus mountains cover the S., and the Westerwald the N. part of the duchy; the Feldberg, the highest point of the former, rises to nearly 2,700 ft.; and the Salzburg-head (*Salzburgher Kopf*), in the Westerwald, reaches the height of 2,600 ft. above the sea. No portion of level surface is sufficiently extensive to be called a plain; and the valleys are generally narrow and confined, though many are highly picturesque.

The Rhine forms a considerable portion of the S. and W. boundaries. The Mayn limits the duchy to the SE., and the Lahn intersects it near its centre, having, for the most part, a SW. course. The Lahn receives within this duchy the Elz, Ems, Aar, and Muhl; and joins the Rhine at Lahnstein, being navigable as far as Weilburg, 14 leagues from its mouth. There are no lakes; but Nassau has a number of mineral springs, especially in the Taunus, where are Ems, Selters, Schlangenbad, and Wiesbaden, among the most frequented spas in Germany. The climate is cold in the mountains, particularly in the Westerwald, but so mild in the sheltered valleys that the vine comes to perfection. The mean temperature of the year in the Rheingau, S. of Wiesbaden, is 10° centr., or 50° Fah. Every part of the duchy is healthy. The soil is no where remarkably fertile, but only a small portion of it is barren; it is least productive in the N., where, however, there are good natural pastures. A portion of the soil in Westerwald is volcanic, consisting of basalt and lava; and near Weilburg are traces of an extinct volcano. Agriculture is the principal branch of industry. The land is mostly divided into small parcels, which are not, however, farmed by their actual proprietors. The whole country, from the Heidelberg to the Rheingau and Homburg mountains, and from the Rhine to the mountains of the Spessart (which tract includes, besides the S. part of Nassau, part of Hesse Darmstadt, Frankfort, Hesse Cassel, and Bavaria), presents one uniform face. This plain is divided between large forests of the common *Pinus silvestris*, occasionally interspersed with oak and beech woods, and large flat districts of corn and vegetables, unrelieved by a single tree or hedge. The open fields are divided into small patches, by the difference of culture, which frequently denotes the boundaries of each peasant's little farm. The farms rarely exceed 50 acres: gentlemen farmers, or speculative agriculturists, are unknown; and the opposite extreme, the class of agricultural day-labourers, is very small. Wheat is grown in the valleys of the larger rivers; but, on the uplands, rye, barley, and oats are almost the only grains cultivated, with potatoes; and in the Westerwald, buckwheat. The S. declivities of the Taunus are covered with chestnut woods and orchards. In the district called the *Rheingau*, further S., along the Rhine and Mayn, the culture of the vine occupies a large share of attention. The finest growths of the Rhine, as Hockheim, Steinberger, Rudesheim, and above all Johannisberg, come from this duchy, in which nearly a third part as much land is appropriated to the culture of the vine as in all Rhenish Prussia. The soil of the Rheingau is thin and sandy; but it is well manured, and very productive. The Hochheim, properly so called, or *hock*, is grown at Hochheim, on a little hill behind the ancient deanery, on a space of about 8 acres, open to the southern sun, and sheltered from N. winds by the town. Each acre has about 4,000 vine plants, valued at a ducat each; and the little hill produces, in good seasons, about 12 large casks (*tonneaux*) of wine. A constant supply of water is afforded to the plants by a small rivulet, and they are protected from too much wet by moveable wooden sheds. But there is another vineyard little inferior to the above; and the surrounding lands yield an abundant produce, which, as in the case of other wines, often passes for the first growths. The produce of the Steinberger vineyard, which belonged to the suppressed monastery of Eberbach, and is now the property of the grand duke, is the strongest of all the Rhenish wines; and, in favourable years, has much sweetness and delicacy of flavour. Flax, hemp, fruits, hops, tobacco, turnips, and chicory, are among the other principal kinds of produce. The pastures are well attended to, and a good many crops are grown for fodder, the rearing live stock being an important branch of husbandry. Bees are numerous, and game abounds in the woods. Iron, lead, copper, and silver are the principal mineral products; bovey coal also is found in the Westerwald, and chalk, marble, roofing slate, and potters' clay elsewhere. Mining and forges are estimated to employ 8,000 workmen. Working in metals is, however, the chief branch of manufacturing industry; the other manufactures are mostly domestic. Linen cloths are woven by the peasantry at their own houses; and some cotton cloths, carpets, woollen yarn and hosiery, morocco leather, sieves, soap, and sealing wax, are made: few, however, of the manufactured articles find their way out of the duchy, the exports consisting principally of mineral waters, wine, cattle, wool, mineral products, and hardware and earthenware.

Accounts are kept in florins (*gulden*) of 60 *kreutzers*, containing 4 *pfennigs* each; the florin = 1*s.* 8½*d.* Engl. The Hessian morgen (*steüernormalmorgen*) = about 8–11ths Engl. acre.

The government is a constitutional monarchy, hereditary in the male line. The *landstande*, or parliament, of the duchy consists of 2 chambers; the first composed of the princes of the ducal house, the heads of 6 noble families, 9 representatives for the rest of the nobility, and an illimited number of members nominated by the duke. The second chamber is made up of 24 deputies elected by the indirect suffrage of all tax-paying inhabitants. The states are convoked yearly. The press is free, and personal liberty, the right of petitioning, and eligibility to all public offices are privileges belonging to every subject. Civil justice is administered in a primary court in the cap. of each of the 28 districts of the duchy; in secondary courts at Dillenburg and Usingen; and a high court of appeal at Wiesbaden. The principal criminal courts are at Wiesbaden and Dillenburg. There are elementary, royal, and grammar schools at Diaz, Usingen, Dillenburg, Hadamar, and Wiesbaden, and a gymnasium in Weilburg, besides female schools, many special academies, and deaf and dumb and other charitable schools. The government has taken considerable pains to promote popular education. By an agreement with Hanover, the university of Göttingen has been constituted the high school for the duchy, except in Rom. Cath. theology, for which students resort to Marburg, in Hesse Cassel. At the census of 1861, there were 237,953 Protestants, and 208,842 Roman Catholics. The revenue, in 1862, amounted to 332,947*l.*, and the expenditure to 426,486*l.* Public debt, 2,396,300*l.* in 1862. Nassau holds, with Brunswick, the ninth place in the German Confederation; it has two votes in the full council, and, with Brunswick, one in the committee. It furnishes to the army of the confederation a contingent of 6,109 men.

Digitized by Google

This country, like Hesse, was anciently inhabited by the *Catti*. The founder of the reigning house of Nassau was Otho of Lauenburg, brother of the emperor Conrad I. In 1255 two collateral lines were formed; and the descendants of the elder have remained in possession of this territory; while those of the younger (Orange-Nassau) have been seated on the throne of Holland.

NATAL, a colonial possession of Great Britain, on the SE. coast of Africa, between 7½ and 31 degs. S. lat., and 28½ and 31 degs. E. long. It has on the N. the country of the Zoolu Kaffirs, from which it is separated by the Buffalo and Trikela rivers, on the E. the Indian Ocean, S. the Umzinkala river, and W. a chain of lofty mountains called the Drakenberg or Kathlamba, running NNE. and SSW. from 80 to 100 m. from the coast. Its area comprises about twelve millions and a half of acres, and it has a seaboard of 150 m. The country shelves rapidly downwards from the mountains into the sea, having the appearance of a hilly declivity intersected by deep ravines, but along the shore and the rivers it is flat and swampy. The declivities of the hills are in part covered with forest trees and bushes, and in part bare and red, owing to the prevalence of the iron ore which they contain. The lower grounds are everywhere covered with vegetation, consisting either of the most luxuriant grass, or of bush or scrub. It is well watered, being traversed by numerous rivers and streams which, rising in the mountains, pursue their winding courses to the sea. In the rainy seasons these are much swollen, and rush forward with great violence. They have generally but a short course; are frequently interrupted by cataracts; and, owing to the quantity of sand and earth which they carry down, they have uniformly bars at their mouths, so that they are in great measure useless for navigation. The soil is well adapted for cultivation; on the alluvial land, along the banks of the rivers, it is particularly so, producing larger crops than grown in the colony of the Cape of Good Hope. The principal rocks are granite, basalt, slate, sandstone, and shale. Iron ore is extremely abundant; coal also is found in different localities, and might be obtained in any quantity. The climate is not too hot; but, in the summer months, the grass is generally brown and dry, and towards the S. frontier droughts are frequent. The district is said to be remarkably healthy, and free from the epidemics by which most parts of Africa are visited.

Tigers, hyænas, wolves, and a few lions lurk in the deeper ravines, and in the forests on the mountains along the frontier of the colony, whence they occasionally descend to prey on the flocks; but they are less feared, and their ravages are of less consequence, than might be supposed. The hippopotamus is found in the pools in the rivers in the interior; elephants and rhinoceroses are also met with, though they are less common now than formerly. Game is abundant, comprising antelopes, hares, pheasants, and partridges. Baboons, monkeys, with sundry varieties of serpents and other reptiles, are among the native animals. The district is in most parts well suited for the rearing and feeding of cattle. Wheat, barley, millet, maize, and beans are cultivated to some extent, and might be raised in any quantity; and sugar, coffee, cotton, indigo, and other tropical productions, are well suited to the soil and climate. The cotton is of very good quality. Vines, figs, oranges, and lemons have also been introduced, with every reasonable success.

The principal harbour is that of Port Natal, lat. 29° 55′ S., long. 30° 41′ E. It opens to the N., and outside its mouth, which is narrow, is a bar of sand, on which there are in ordinary tides about 6 ft. water at ebb, and about 12 ft. at flood; but at springs the rise of the tide is greater. Within the bar there are from 12 to 15 and 16 ft. water at ebb.

Natal was erected into a colony in 1856. It is governed by a lieutenant-governor, assisted by an executive council, composed of the chief justice, the senior officer in command of the troops, the colonial secretary, the treasurer, the attorney-general, and the secretary for native affairs; and a legislative council, composed of four official members, viz. the colonial secretary, the treasurer, the attorney-general, and the secretary for native affairs, and 12 members elected by the counties and boroughs. The public revenue amounted to 123,089*l.* in 1863, and the expenditure to 117,000*l.* The total value of the imports, in 1863, was 473,333*l.*, and of the exports, 158,565*l.*

The colony of Natal derives its name from the fact of its discovery by Vasco de Gama, the celebrated Portuguese navigator, on Christmas-day, 1497. From the time of discovery, but little is to be found respecting it till 1686, when a Dutch vessel was wrecked in the Bay of Natal. The unfortunate crew spent some twelve months there engaged in building a small vessel from the fragments of the wreck. Having accomplished their task, they sailed for the Cape, leaving behind them four Englishmen, three of whom were subsequently taken off by a Dutch ship which visited the coast. The Dutch formed a settlement in 1721, but soon abandoned it.

In 1824 Lt. Farewell, an officer of the Royal Marines, having the previous year visited Natal on an exploring voyage, endeavoured to colonise it. Though the British government declined to recognise or aid him in his plans, he induced some twenty enterprising individuals to join him in this undertaking. On their arrival they found Chaka, a powerful chief, of great talent, who had absorbed into a nation under his own despotic sway the various tribes inhabiting a vast tract of country, at the summit of his power; he sanctioned the formation of a settlement by this small band of white men, which was broken up at his death, about four years later. The tribes thus amalgamated by Chaka have been known since under the general title of Zulus.

Towards the close of the year 1837 a large body of Dutch Boers from the Cape colony, taking offence at restrictions placed on them by the British government in regard to their relations with their coloured servants, migrated to Natal. Many of them were treacherously murdered by Dirgaan, the Zulu chief, the murderer of and successor to his brother Chaka. During the next two years the Zulus and the Boers waged war with various success; but, in 1839, the Dutch obtained a decisive victory over the natives.

In consequence of these disturbances, the governor of the Cape determined to take military possession of the district, and sent there a detachment of troops for the purpose. This detachment was shortly withdrawn, and after the lapse of a brief interval a second force, under Captain Smith, was sent (1840). These troops came into collision with the Dutch Boers, were defeated by them, and forced to entrench themselves, and were completely blockaded till the arrival of a considerable force under Colonel Cloete, when a junction was effected with the garrison under Captain Smith. The Boers shortly submitted, and on the 5th July, 1840, their signed act of submission was received by Colonel Cloete at Pietermaritzburg. Three years after, the district of Natal, with the sanction of the British government, was proclaimed by the governor of the Cape to be a part of that colony.

Digitized by Google

NATCHEZ, a city of the U. S. of N. America, state Mississippi, on the E. bank of the river of the same name, 285 m. above New Orleans. Pop. 13,550 in 1860. The town is situated partly on a bluff or high ground, about ¾ m. from the shore, and 150 ft. above the level of the river, but partly also 'under the hill,' close by the latter. The upper town is laid out in broad streets, crossing each other at right angles, and shaded with fine spreading trees, the whole having an appearance of comfort and opulence. The principal buildings are the court-house, the gaol, academy, and a number of churches, besides which there are many handsome private houses, with attached gardens. 'Natchez,' says a traveller, 'though occasionally very unhealthy, from the prevalence of yellow fever, is one of the most beautiful towns of the U. S. The "pride of India" tree, shading the streets, was in blossom, having a greater resemblance to the lilac than to any other of the flowering shrubs. Its leaves are long and spiked; and the growth of these trees is so rapid, that in a few years they completely embower a village, and give a delightful freshness to the landscape.' A fine esplanade, 100 yds. wide, occupies the edge of the bluff close in front of the upper town, and commands an extensive and striking view of the river, the rich country eastward, and the wide dismal swamp on the W. side of the Mississippi. The town 'under the hill, however, and that part in which the principal river trade is carried on, is a repulsive place, and is the general resort of the vilest characters from the upper and lower country. The houses are tenanted by boatmen and mulattoes; and on the landing-place are several hotels, in which vice and immorality of every kind are unblushingly displayed. Dancing assemblies for the refuse of both sexes are held in the public rooms of these houses almost every night; and there are other rooms devoted to gambling.' The lower part of the town is inhabited by some of the wealthiest merchants; and this being one of the principal places above New Orleans for the shipment of cotton, the streets at a certain period of the year are almost barricaded with bales of that article.

Natchez was formerly the residence of the chief of the Indian tribe, from which the town was afterwards named. In 1716, the French formed a settlement here, and established a port called St. Rosalie. Disputes, however, arose between the natives and the new-comers, which ended in a general massacre of the latter. The French, a few years afterwards, sent an army into the country; and so vigorous were their measures, that the whole nation was either exterminated, or sold as slaves. Indian mounds and other monuments are visible near the town, as are the ruins of the French port.

NATOLIA, ANATOLIA, or ANADOLI (a corruption from Ἀνατόλη, the East, or *Levant*), a peninsula of W. Asia, anciently called *Asia Minor*, and now constituting a pachalic of Asiatic Turkey: it extends between lat. 36° and 42° N., and between long. 26° and 42° E., being bounded N. by the Black Sea, E. by Armenia and the Euphrates, S. by Syria and the Mediterranean, and W. by the Archipelago. Length, from C. Kara-burun to the Euphrates, 670 m.; breadth from 300 to 440 m.; estimated area, 250,000 sq. m., or about 1–16th more than that of the Spanish peninsula. Pop. probably about 4,350,000. The coast-line is irregular, especially on its W. and S. sides, where it is deeply indented by the Gulfs of Adramyti, Smyrna, Kos, Makry, Adalia, and Scanderoon. The surface may be generally described as a high table-land, dotted with salt lakes, and enclosed by two ranges, detached from the plateau of Armenia, and running nearly parallel to the N. and S. coasts. The latter of these chains, the *Mons Taurus* of the ancients, and Sultan-dagh of the Turks, runs close to the shore in some parts of Karamania, forming a bluff precipitous coast, intersected here and there by narrow gorges, through which numerous torrents run into the sea. One of the heights, close to the Gulf of Adalia, was ascertained by Captain Beaufort to be 7,800 ft. high; but there are several summits in the interior, the snow on which descending one-fourth the way down their sides, indicates a height of 10,000 ft., or nearly equal to that of Mount Etna. (Beaufort's Karamania, p. 57.) The N. range is much less clearly defined, the only snow-covered peak being *Mount Olympus*, about 25 m. S. the Sea of Marmora. Connected with Olympus westward is the celebrated *Mount Ida*, overlooking the plain of Troy; and the highest summit of which, called *Gargarus* by Homer, and Kaz-dagh by the Turks, rises about 5,000 ft. above the sea. About 100 m. S. of Ida runs another range, the *Tmolus* of antiquity, mentioned by Ovid, Virgil, and Seneca as being celebrated for its excellent wines and rich metallic veins. The central table-land is partly drained by the rivers flowing into the Black Sea; but a large portion, lying N. and NW. the range of Taurus, about 240 m. in length by 150 m. in breadth, is covered with numerous salt lakes, marshes, and rivers, having no visible outlet. In rainy seasons these lakes overflow, and, but for the ridges that cross the plain and separate it into basins, would submerge nearly 200 sq. m. of the surface. The largest of these is the lake Beishehr, 43 m. WSW. Konieh; but by far the most curious in the peninsula is the *Tatta palus* of antiquity (about 50 m. N. Konieh, and 2,500 ft. above the sea), the waters of which, acc. to Strabo, were so impregnated with brine, that any thing immersed in it was soon covered with a saline incrustation. The Turks call it Tuzla, and it still furnishes in abundance the article for which it was anciently famous; but it contains neither fish nor conchiferous animals. (Geog. Journ., x. 299.)

The largest rivers of Natolia flow into the Black Sea. The *Halys*, or Kizil-Ermak ('Red River'), rises by 2 branches on the S. side of Mount Erdjik (an. *Argæus*), and flows by a tortuous course of about 500 m., first NW., and subsequently NE., into the Black Sea, where it is about as wide as the Seine at Paris. It is the largest river of Asia Minor; and, in ancient times, was considered the boundary between the Lydian and Median kingdoms, as well as a natural dividing line of the peninsula. (See Herod., i. 72.) E. of the Halys is the *Iris* (now the Jekil Ermak), a much smaller river, rising in the N. range of the table-land, and flowing W. by N. past Tokat into the Black Sea, about 20 m. E. Samsoun (an. *Amisus*). In the NW. part of Natolia is the large and celebrated river *Sangarius* (now Sakaria), the most distant source of which is in the central plateau, about 60 m. SSW. Angora; lat. 38° 5′ N., long. 32° 3′ S. After receiving numerous tributaries, it turns northward, near the modern town of Eski-sher (an. *Dorylæum*), and flows into the Black Sea, about 50 m. W. by S. Erekli. The three principal rivers flowing into the Archipelago are the *Caicus*, the *auro turbidus Hermus* of Virgil (Geog., ii. 137), now the Sarabat, the marshy *Caystrus*, at the mouth of which was the Ἄσιος λειμών of Homer (Il., ii. 461), and the *Meander* (now Mendere), by far the largest of the three, and celebrated in antiquity, not only for the sinuosities of its course, but for the fertility

Digitized by Google

of its valleys, and the number of flourishing cities on its banks. It rises by numerous sources in long. 30° 8′ E., and takes a general course, W. by S., about 220 m. to its mouth, near the ruins of *Miletus*. The rivers on the S. side of the peninsula, are, with one or two exceptions, little more than brooks or mountain-torrents; and the *Cydnus*, the scene of the splendid pageant of Cleopatra, is at present only 160 ft. wide, and inaccessible to any but the smallest boats. (Beaufort's Karamania, p. 275.)

The geological formation of Natolia partakes in many parts of a volcanic character. The high region of Phrygia, called *κατακεκαυμένη*, abounds with lava and other substances, indicating the existence of igneous action at some previous period. Earthquakes have frequently visited the W. part of the peninsula, and all but demolished Laodicea, Apamea, Cibotus, Sardes, and other cities of antiquity; and it has still numerous thermal and sulphurous springs. The most general formation, however, is of white limestone, bold cliffs of which rise in Karamania, from 600 to 700 ft. perpendicularly from the sea, exhibiting the most curious contortions of strata. (Beaufort, p. 212, 213.) On the N. side of the peninsula the same description of strata prevails, covered with gypsum, and in the highest mountains serpentine is found alternating with the blue mountain-limestone. The marble of Asia Minor was extensively used by the wealthy Romans in building their houses and villas. These mountains abound in mineral riches; copper is wrought to a considerable extent near Trebizond, Samsoun, and Siwas; and the region of the *Chalybes*

'——— sævissima quamquam
Gens Chalybum, duris patiens cui cultus in arvis
Et tonat adflictâ semper domus ignea massâ.'
Val. Flac. Arg., iv. 610.

is still an important mining district of the peninsula. Lead has been found in several places, though not wrought; but rock-alum is procured near Unieh (an. *Œnæ*), and exported in considerable quantities.

The climate of Natolia, owing to the varying elevation and different aspects of its surface, will admit of no general description. On the central plateau, the height of which, exclusive of mountains), varies from 2,800 to 3,900 ft. above the sea, it is cold, though salubrious, and snow lies, in many parts, for 2 or 3 months of winter; but, in July and August, the heat is often intense, and rendered more oppressive by the tendency of the sandy surface to absorb heat. On the W. shores the climate is genial, and the soil very productive; but in some parts, as at Smyrna and elsewhere, epidemics are prevalent, and the plague often makes great ravages among the pop. The heat in July is stated by Mr. Addison to range from 84° to 94° Fah. in the shade; rain seldom falls, though the want of it is, in some measure, compensated by heavy dews. (Damascus and Palmyra, i. 320, 321.) The climate on the N. side is far more temperate, and rain is frequent. The soil on the coast is tolerably fertile, producing wines, olives, rice, millet, and other grains; but tillage is much neglected, irrigation and the manuring of land being little practised. The N. shores are covered with forests of oak, ash, larch, beech trees, &c., furnishing abundant supplies of timber for the Turkish navy. The mountains of Karamania are covered principally with pines. Large flocks of sheep and goats graze on the lofty plains of the interior; their wool and hair forming an important article of commerce between Angora and Smyrna.

Natolia is under a pasha or military governor, to whom are subject the respective beglerbegs of Anadoli, Karamania, Marash, Siwas, and Trebizond, the country being further subdivided into 17 sandjiaks. The fixed pop. consists principally of Turks and Greeks, with smaller numbers of Armenians and Jews; besides whom there are nomadic tribes, both Kurds and Turcomans, employed partly in pastoral, but partly also in marauding occupations. (For further particulars see TURKEY.)

Natolia, which was first called simply Asia, afterwards *ἡ κατὼ Ἀσία*, to distinguish it from that more to the E. *ἡ ἀνὼ*, was called *Asia propria* or *proconsularis* by the Romans, and did not receive its appellation of *Asia Minor* earlier than the time of Orosius, in the beginning of the fifth century. With respect to the original inhabs. of this celebrated peninsula, we have little information on which any reliance can be placed; but there is reason to believe that the Phœnicians had settlements, at a very early period, on its S. and W. coasts, and that there were frequent emigrations to it from Thrace, as well as Thessaly, soon after the Trojan war. The great Ionian migration (composed of colonists from Attica and Achaia) took place anno 1130 B.C.; and, about 80 years afterwards, a colony of Dorians, from Megara, Trœzene, and Argos, settled on the SW. coast, a little S. of those last mentioned. Subsequently to the establishment of these Greek colonies, and during the existence of the Lydian monarchy (which lasted from a period of obscure antiquity down to the overthrow of Crœsus by Cyrus, B.C. 556), Asia Minor was overrun successively by large bodies of Cimmerians and Scythians, who, however, though they penetrated as far as Lydia, and took Sardes, were unable to secure a permanent footing in the country. (Herod., i. 15.) The numerous revolutions, indeed, caused both by conquest and colonisation, are sufficiently attested by the statement of Herodotus, that the peninsula, between four and five centuries prior to the Christian era, comprised thirty different nations (*ἔθνεα*). At the fall of the Lydian kingdom, Asia Minor was formed into four satrapies, belonging to the Medo-Persian empire, under which it remained upwards of two centuries, though the interior of the country, inhabited by nomadic tribes, was never fully subdued. Notwithstanding the oppressions of the provincial governors, and their occasional struggles with the 'Great King,' the Greek colonists continued to flourish, and they gradually spread themselves northward, along the Euxine Sea, as far as *Trapezus* (now Trebizond), and southward, on the shores of the Mediterranean to the Gulf of Issus, everywhere distinguishing themselves by their industry and commercial activity. In refinement, also, and the cultivation of the arts, they were at least equal, if not superior, to their European brethren; at all events, if Asia Minor have not given birth to great warriors and statesmen, she may justly boast of the all but unrivalled excellence of her poets, historians, philosophers, sculptors, architects, and musicians. In poetry she lays claim to Homer, Hesiod, Sappho, Alcæus, and Nicander; in philosophy to Thales, Pythagoras, Anaxagoras, Bias, and Pittacus; and in history to Hecatæus, Hellanicus, Herodotus, Ctesias, and Dionysius of Halicarnassus. The Macedonian succeeded the Persian dominion *anno* 331 B.C.; from which time, during nearly two centuries, Asia Minor was subject to many vicissitudes consequent on the changing fortunes of Alexander's successors and their descendants, as well as the formation of several minor kingdoms (as Pontus, Bithynia, &c.) under native princes. During the century immediately preceding the

Digitized by Google

Christian era the various parts of the peninsula fell, one by one, into the hands of the Romans, under whom it formed a proconsulship; and it attained, during their dominion, not only its most uniform and settled, but also its most prosperous state; a fact sufficiently proved by the number of large cities built or embellished, and the great works undertaken and completed, during the early period of the empire. The decline of the Roman power exposed the peninsula to fresh invasions from the E.; and at the commencement of the 8th century the Mohammedans began to settle themselves on its E. borders. At the period of the first crusade they had spread over almost the whole peninsula, and reduced it to a state in many respects similar to that in which we find it at the present day, except that it was more populous. It was ravaged by the crusaders in the 12th and 13th centuries, and was overrun by the Tartar hordes under Timour after the battle of Angora (1402 A.D.); but neither produced any permanent effect on the condition of the population.

NAUMBURG, a town of Prussian Saxony, distr. of its own name, on the Saale, 25 m. S. Halle, and 28 m. SW. Leipsic, on the railway from Halle to Eisenach. Pop. 14,352 in 1861. The town is situated in a fertile vale, and is tolerably well built, having several good and wide streets, with 3 suburbs. Its principal public buildings are the citadel, town-hall, and arsenal, a noble Gothic cathedral, 5 Calvinistic churches, 2 orphan asylums, 6 hospitals, a poor-house, gymnasium, and trade school. It is the seat of a superior and ordinary tribunal for the circle, a council for do., and board of taxation. It has manufactures of woollen cloths, hosiery, and shoes, and large chemical works. The 2 annual fairs of Naumburg were formerly much celebrated, but have recently declined in importance.

Naumburg is celebrated in history as having been besieged in 1482 by the Hussites, under Procopius. This general, irritated by the resistance of the inhab., made a vow to put them all to the sword, but was deterred from his purpose by the earnest supplications of the children of the town, who came out in procession and threw themselves at his feet. The anniversary of this event (called the *Kinderfest*, or 'Children's Fete,) is still celebrated on the 28th July, and has furnished Kotzebue with the subject of one of his best plays.

NAUPLIA, or NAPOLI DI ROMANIA, a city and sea-port of Greece, on the E. side of the Morea, at the extremity of the bay of its own name, 5 m. SE. Argos, 58 m. WSW. Athens. Pop. 12,400 in 1861. The town, which stands on the NE. side of a hill, with a tabular summit, and is built in the form of an amphitheatre, has been greatly enlarged and improved since the war of independence.

It now comprises several wide streets, regularly laid out, and lined with good houses, in the European style; some of which, for size and elegance, might pass, in Greece, for minor palaces. The principal public buildings, besides the churches, are a royal palace, formerly the residence of Count Capo d'Istria, and a new court of justice, called the Βουλευτήριον. The shops are well stored with provisions and other articles, and there are numerous cafés about the port, and in the chief thoroughfares. A quay faces the harbour, which is commanded by the ancient Fort Palamedi, one of the strongest castles in Greece: at its foot is a stone aqueduct, from which the town is well supplied with water. Nauplia possesses one of the largest government dockyards in Greece, and extensive storehouses. Its trade is very considerable, the principal exports being oil, wine, gall-nuts, wax, silk, wool, and cotton; while the imports comprise corn, manufactured and colonial goods, with timber. The commerce is principally carried on in Greek bottoms. The roadstead of Nauplia is W. of the town, in 8 and 9 fathoms; but within the harbour there are only 2½ fathoms, and in entering it is necessary to keep in mid-channel, to avoid a shoal of 6 ft. water.

Nauplia is, in comparison with the rest of Greece, well provided with literary establishments. They comprise a military academy, school for the middle classes, circulating library, several book societies, two lithographic establishments, and five printing-houses, one of which is the property of the government, and exclusively employed in printing their official paper. The pop. of Nauplia comprises a considerable number of Germans, French, and Italians: house-rent is high, and the rate of living is not much cheaper than at Paris or Naples. The climate is unhealthy, owing to the miasma from the neighbouring marshes in summer, and the cold searching NE. winds that prevail during winter: the town has likewise been frequently ravaged by the plague.

The ancient Nauplia was the port and arsenal of Argos during the flourishing period of Grecian history; but it was deserted and in ruins when visited by Pausanias, who noticed the vestiges of its walls and docks (Ναυάστες), the temple of Neptune, and a fountain called Canathus, still existing. The inhabs. had been expelled several centuries before by the Argives, on suspicion of having favoured the Spartans, who in consequence received them into their territory, and established them at Methone in Messenia. The town revived under the Byzantine emperors, and was occupied in the 13th century by the Venetians, who made it their chief settlement in the Morea. It was taken by Sultan Solyman in 1537, but was soon afterwards recovered; nor did the Venetians finally lose possession of it till the treaty of Passarowitz in 1718 secured it to the Porte, which retained it down to the close of the war of independence. Nauplia was the seat of the new government from 1829 to 1834, when it was transferred to Athens.

NAVAN, an inland town of Ireland, prov. Leinster, co. Meath, at the confluence of the Blackwater with the Boyne, 26 m. N. by W. Dublin, on the railway from Dublin to Kells. Pop. 3,855 in 1861. The town has a par. church, a Rom. Cath. chapel, a convent, an endowed grammar-school, a national school, a preparatory Roman Catholic college, with a chapel, court-house, bridewell, fever hospital, the infirmary for the county, and cavalry barracks. At one end of the town is a large rath or mote. Owing to the opening of the Boyne navigation to Drogheda, and the railway to Dublin, Navan has become a place of considerable trade, especially for agricultural produce. It has also corn and flour mills, paper mills, distilleries, and a tannery. The old corporation sent 2 mems. to the Irish H. of C. till the Union, when it was disfranchised. Markets on Wednesdays; fairs on Easter and Trinity Monday, the 2nd Monday in September, and the 1st Monday in December.

NAVARINO, a town and sea port of Greece, on the SW. coast of the Morea, 136 m. SW. Athens, and 92 m. S. by W. Patras. Pop. 2,351 in 1861. The town stands on the S. side of a fine semicircular bay of the same name, and is surrounded by walls, and defended by a strong citadel, placed on a lofty rock. Streets narrow, steep, and irregular, lined with small, mean-looking houses, chiefly of

Digitized by Google

stone, cemented with mud, and encumbered in many places with the fallen ruins of former habitations. At the opposite extremity of the bay are the remains of Navarino Vecchio, consisting of a fort covering the summit of the hilly peninsula of *Coryphasium*, on the S. slope of which once stood the ancient *Pylos*. The long rocky island of Sphagia (an. *Sphacteria*) stretches about 4 m. from N. to S. across the mouth of the bay, forming a kind of natural breakwater for its protection from the heavy seas that would otherwise be thrown in from the W. The entrance is at the S. side of the island, and the bay is one of the finest asylums for shipping in the Mediterranean. It has water to float the largest ships, and good holding ground. Ships usually moor about ¼ m. from the modern town, or behind the island of Marathonisi, near the centre of the harbour. The circular lagoon, on the N. side of the harbour, directly E. Navarino Vecchio, abounds with fish; but, as it is not mentioned either by Thucydides or Pausanias, it is probably of modern formation.

The ancient Pylos, one of those towns that claim to be the birthplace of Nestor (called by Homer Νηλήϊον ἄστυ), was deserted by its inhab. after the Messenian war. When the town was restored, we have no information; but in the time of Pausanias it was inhabited, and comprised, among other monuments, a temple of Minerva Coryphasia, and a monument of Nestor. (See Paus. Mess., 36, quoted by Leake, i. 413.) The island of Sphacteria, which Thucydides (iv. 35—38) has described as 'desert, pathless, and covered with wood' (ὑλώδης τε καὶ ἀτριβὴς πᾶσα ὑπ' ἐρημίας), is celebrated in the history of the Peloponnesian war as having been occupied by the Lacedæmonians after the defeat of their fleet by the Athenians, under Demosthenes. They were detained here during 72 days, and were at length compelled to give themselves up as prisoners, and to surrender their fleet in pledge of their fidelity to their engagement. The battle which preceded this blockade took place in the bay of *Pylos*, or Navarino, which has also obtained celebrity in modern times, during the late war of independence, for the decisive victory gained (October 20, 1827) by the combined fleets of England, France, and Russia, under Sir E. Codrington, over the Turco-Egyptian fleet, commanded by Ibrahim Pacha. Notwithstanding the great preponderance of force and science on the part of the allies, the Turco-Egyptian fleet made an obstinate resistance, but in the end it was almost totally destroyed. A convention was soon after entered into, by which the Turks agreed to evacuate the Morea; and this battle finally led to the acknowledgment by the Porte of the independence of Greece, in the treaty of Adrianople, in 1829.

NAVARRE (Sp. *Navarra*), an ancient province of Spain, on the NE. side of the peninsula, bounded N. by France and the Pyrenees, E. by Aragon, S. by Old Castile, and W. by the Basque provinces. Greatest length from SW. to NE., 75 m.; breadth, about 50 m. Area, 2,440 sq. m. Pop. 297,422 in 1857. The surface consists, in a great measure, of subordinate mountain ranges, running southward from the main ridge of the Pyrenees; but the S. part of the prov., near the Ebro, has some extensive and fruitful valleys. The principal summits within the limits of the prov. are Altobiscar, 5,380 ft. high; Adi, 5,218 ft.; and 3 others rising above 3,000 ft. from the sea. The highest points of the Pyrenees, however, are considerably to the E. in the kingdom of Aragon. The principal passes over the Pyrenees from Navarre into France are, proceeding eastward, those of Verra, Maya, and Roncesvalles, the last of which is, according to Bory St. Vincent, 5,771 ft. above the sea. The mountains are chiefly of transition and secondary formation, consisting in a great measure of the rock called Pyrenean limestone. Jasper and marbles, also, occur in large beds; and there are several iron mines, besides one of copper. Rock-salt is quarried at Valtierra, near the Ebro, and the yearly returns amount to 12,000 arrobas: the prov., also, comprises numerous thermal springs. Principal rivers, the Aragon, Zidacos, and Arga, uniting their waters in one channel, which falls into the Ebro opposite Alfaro. The only river flowing into the Bay of Biscay is the Bidasson, which rises in the mountains forming the Val de Bastau, and has a course ENE. of about 45 m., falling into the sea near Fuenterrabia. The climate of the mountainous districts is very severe in winter, and not genial, even in summer; but in the valleys of the Ebro and Aragon the temperature is much higher, and the climate delightful, as well as healthy. The forest trees of the Pyrenees consist chiefly of the pine, large quantities of which are sent down the Ebro to Zaragoza and other places; but there are also considerable numbers of beeches, deciduous oaks, and chestnut trees; and no prov. furnishes so good a supply as Navarre of useful building timber. The wild animals of the mountains are wolves, wild boars, foxes, and wild cats; game is abundant in every part of the prov. Pasturage is extensively followed, especially in the N. districts; and the stock at the last general census included 43,636 oxen, 4,616 calves, 25,760 mules, 629,500 sheep, 69,500 goats, and 31,760 hogs, the produce of wool being estimated at 56,490 arrobas (12,609 cwt.). The higher part of the kingdom, on the frontiers of France, is bleak, cold, and unsuitable for tillage; but the plains near the Ebro have a rich productive soil, well-watered by numerous streamlets connected with the larger rivers. The principal crops are wheat, maize, barley, and oats. Hemp and flax are also raised, with oil and wine. About the half of the latter, with the greater part of the wool, and about 30,000 bushels of corn, are exported chiefly to France in return for silk and cotton fabrics and colonial produce. Cyder is made in the Val de Baztan, and liquorice is raised in the S. districts for exportation. Agriculture, however, is much neglected. Manufactures are also inconsiderable, including only those that are most indispensable, and some distilleries. The intercourse with the adjoining provs. is maintained by the Northern of Spain railway, and by the canal of Aragon, running from Tudela to Zaragoza. The great road from Pampluña to Madrid is little inferior to the modern roads of England.

The kingdom of Navarre is still governed by its separate laws, and has, nominally at least, the same constitution which it enjoyed when it was a separate monarchy; but its cortes, or estates, have not met since 1713, and cannot be convoked without the authority of the crown. A council, however, representing the cortes, sits permanently at Pampluña, decides on the method of raising the revenue, fixes the tariff, and exercises other commercial privileges. The supreme power is vested in the viceroy, who presides at the royal council (*Consejo Real*), consisting of six judges, an attorney-general, and 4 *alcades*: this is the highest tribunal for civil and criminal causes. The inhabitants of Navarre are tall and strongly built, resembling the Biscayans in independence of spirit, attachment to their religion, and jealousy of their ancient national privileges. Castilian is the general language of Navarre, but the Basque is spoken in the N. and W. districts.

Navarre is divided into 17 *partidos*, which are

Digitized by Google

again subdivided into 74 *merindades*, or districts; and the kingdom comprises 9 cities, the principal of which are Pamplúna, the cap. and seat of government, Tudela, the once royal city of Olite, and Estella.

The nhab. of Navarre, in the time of the Romans, were called *Vascones*, in common with those in the neighbouring parts of the peninsula, and were faithful subjects of the empire till the close of the 5th century, when they were subdued by the Visigoths, under whose sway they remained between 200 and 300 years. The Arabs overran the country in the 8th century, but were unable to effect its conquest. Inigo, count of Bigorres, having been elected king in the 9th century, the crown remained upwards of 5 centuries in his family, till in 1590 it became united, through intermarriage, with that of France, the title of whose monarchs, from the time of Henry IV. (with the exception of Napoleon) to that of Charles X., was 'King of France and Navarre.' In 1512, however, Ferdinand of Aragon united all the country S. of the Pyrenees to the crown of Spain; so that only the small portion N. of that chain remained annexed to the French monarchy: this formed the prov. of Béarn before the revolution, and is at present included in the dép. of the Lower Pyrenees.

NAXIA (an *Naxos*), an island of the Grecian Archipelago, the largest of the group called the Cyclades, about 5 m. E. Paros, its cap. of the same name being in lat. 37° 7′ N., long. 35° 26′ E. Shape, oval: circuit, about 48 m.: area, 106 sq. m. Pop. 13,230 in 1861. The coast is much indented and precipitous, especially on the NE. side; and the surface is very uneven, comprising several high mountains of primitive formation, on which are superimposed strata of grauwacké and mountain limestone: the culminating point of the island, anciently called the hill of Zeus (3,310 ft. high), is called *Zia:* it attained some celebrity from its containing a cavern or grotto, to which, according to tradition, the Bacchantes came to celebrate their mysteries and festivals. Emery is wrought in one part of the island. Large flocks of sheep feed on the mountain sides; but both their wool and flesh are of inferior quality.

Naxia has few large trees, but is pretty thickly covered with lemon trees, myrtles, oleanders, thorny brooms, the arbutus and labdanum plant, *atractylis gummifera*, the produce of which is chewed by the natives, and various kinds of leguminous plants, besides the olive, fig, and vine, which are extensively cultivated. The wine, however, though characterised by Athenæus as 'the nectar of the gods,' is now of very indifferent quality, owing to the want of care in its preparation. The oil, also, is inferior to that produced in most of the other islands. The island was famous in antiquity for its fertility, but agriculture is now so much neglected that the corn raised is sufficient only for six months' consumption of the inhab. Vegetables, however, are so abundant, that considerable quantities are sent to Syra. Lime juice, also, is exported, chiefly to Russia. In the S. of the island is a small salt-pan, from which the cap. is supplied with salt. The island abounds with game, and field-sports constitute a favourite occupation of the inhab.

Naxia, the cap. of the island, occupies an eminence close to the sea on the W. coast (which is the only part accessible to shipping), and has 4,000 inhab. Its narrow streets, lined with dilapidated houses, exhibit a profusion of marble; and there is scarcely a dwelling in which there are not ancient inscriptions or other monuments. A castle, built by the Venetians, occupies the summit of a hill above the town. The principal remains of the ancient Naxos are a gate belonging to a temple of Bacchus, on a lofty crag, an aqueduct, and a jetty now under water, but still distinguishable in calm weather. It is the residence of a Greek and Latin archbishop, and there are several churches and convents belonging to both religions. The harbour of Naxia, called the Porto Saline on account of the salt collected there, is exposed to the N. and NW. winds, and being almost surrounded by hidden rocks, is unfit for the anchorage of large ships. The island comprises 40 villages; and there are numerous country-houses, forming the residences of the nobles and gentry.

Naxos (which, according to Pliny, was called at different times Strongyle, Dia, Dionysias, and Callipolis) was probably first colonised by Carians. The Naxians were among the most steadfast opponents of Persian aggression, and the failure of the expedition undertaken by the Persians against this island at the suggestion of Aristagoras, led to the revolt of the Ionian states. Soon afterwards, Naxos was conquered by the Persian fleet under Datis and Artaphernes, who destroyed the city and enslaved its inhabitants. (Herod., v. 28. vi. 96.) The Naxians, however, had sufficiently recovered 7 years afterwards to enable them to furnish 4 well-equipped triremes for the fleet at Salamis. The Athenians, even in the time of Pisistratus, claimed them as colonial dependents; and, after the Persian war, they deprived them of their liberty. Naxos was celebrated in ancient mythology for the worship of Bacchus, who is alleged to have been born in the island. It became tributary to the Romans after the fall of Corinth, 146 B.C., but was ceded by Mark Antony to the Rhodians after the battle of Philippi. The island was afterwards annexed to the possessions of the eastern empire, and subsequently became the possession of the Venetians, and the cap. of a dukedom which embraced most of the other Cyclades. At length, in the reign of Selim II. (A.D. 1570) it was united to the Ottoman empire. The Turks, however, allowed the inhab. to retain their ancient laws and government, contenting themselves with occasionally sending a *waiwode* to collect the land-tax and customs. It now forms a part of the kingdom of Greece.

NAZARETH, or NASSARA, a small town of European Turkey, in the pachalic of Acre, celebrated as having been the residence, during his youth, of the founder of Christianity; 17 m. ESE. Acre, and 70 m. N. by E. Jerusalem. Pop. estim. at 3,000, of whom 500 are Turks, and the rest Christians. It stands on the W. slope of a delightful valley, encompassed by rocky mountains of no great height, which rise round it like the edge of a shell, as if to guard it from intrusion. The houses are mostly wretched stone cottages, with mud floors and roofs; nor does it comprise any thing worthy of notice, except a Latin church and convent, with two other churches, belonging respectively to the Maronites and Greek Catholics. The Turks also have a mosque, erected at the beginning of the present century. The Latin convent, belonging to the missionaries of the Terra Santa, at the E. end of the village, is a spacious and commodious building of stone, surrounded by high walls, which enclose a church, cells for the friars, and extensive accommodation for pilgrims and travellers. The church, called that of the Annunciation, is an ill-proportioned and gaudily ornamented building, said to occupy the spot where, according to tradition, the house of Joseph and Mary stood before its miraculous removal to Loretto. The columns and interior walls are hung round with silk damask, and there are two tolerably good

Digitized by Google

organs. Beneath the high altar is the descent to a subterranean cave, in which the Virgin is said to have lived, and which is divided into small grottoes, pointed out as her kitchen, parlour, and bed-room! Here also are two granite columns, each 2 ft. 1 in. in diameter, and about 3 ft. apart, which are supposed to occupy the very places where the Angel and the Virgin stood at the precise moment of the Annunciation. The innermost pillar is broken through, above the pedestal, and, although it touches the roof, it is represented to be self-supported in the air. 'The fact, however,' is, says Dr. Clarke, 'that the capital, and a piece of the shaft of a grey granite pillar, have been fastened on to the roof of the cave: so clumsily, also, is the rest of the *hocus-pocus* contrived, that what is shown for the lower fragment of the same pillar is not of the same substance, but of Cipolino marble.' (Travels in Greece and the Holy Land, iv. 170.) It was formerly the custom of the sick, during the prevalence of the plague, to resort thither for the purpose of rubbing themselves against the pillars, believing thus to obtain a certain cure; but, within the last few years, a railing has been formed to exclude the patients, who, however, still flock round in hopes of relief from being in its immediate vicinity. Different interesting localities are pointed out to the pilgrims, such as Joseph's workshop, enclosed in a small chapel, the synagogue in which Christ explained the celebrated passage of Isaiah (Luke iv. 16–22), the table on which Jesus ate his last meal previously to his final departure for Jerusalem; and even the precipice, or 'brow of the hill,' to which they led him, 'that they might cast him down headlong.' (Luke iv. 29.) Here, however, as at Jerusalem, fancy, and the desire of imposing on the credulity of the devotees, have had a far greater share in fixing these localities, than any regard for authenticity. The chamber containing the fictitious *mensa Christi* is the favourite resort of all pilgrims, Turks as well as Christians; and to Rom. Catholics, who say the Paternoster and Ave Maria in it, the Pope grants a plenary indulgence of seven years! The present inhabs. of Nazareth are, with the exception of a few weavers, employed in rural pursuits. Corn is raised abundantly in the neighbourhood, especially by the monks of Terra Santa, who are the chief farmers; and a small portion of it is sent to Acre, which is the chief source of supply for the town. The pasturage of cattle and goats, also, is extensively pursued, from the milk of which is made a large quantity of butter and cheese, both of indifferent quality. (Turner's Levant, ii. 130.)

Nazareth is not mentioned in the Old Testament: it was a city of the tribe of Zebulun, and afterwards of the N. portion of Palestine, called Galilee, and was held in so little esteem by the Jews of Jerusalem as to give rise to the exclamation, 'Can any good thing come out of Nazareth?' (John i. 46.) It owes its entire celebrity to the circumstance of having been the residence of Jesus Christ almost from his birth to the commencement of his ministrations. Here the angel Gabriel announced to the Virgin the approaching birth of the Saviour; thither the holy family returned 33 days after his birth at Bethlehem; and during his infancy, spent in the house of Joseph the carpenter, 'the child grew and waxed strong in spirit, filled with wisdom, and increasing in favour with God and man.' (Luke ii. 40, 52.) Christ preached here 'the acceptable year of the Lord,' immediately after the temptation; and found, from the unfavourable manner in which he was received, that 'no prophet is accepted in his own country.' His hearers were filled with wrath, rose up, thrust him out of the city, and led him to a precipice to destroy him; but he, passing through the midst of them, went his way (Luke iv. 28–30); and thenceforward Capernaum seems to have been his general residence, though there can be little doubt that he occasionally visited Nazareth to see his mother and the members of her family.

NEAGH (LOUGH), a lake of Ireland, the largest in the United Kingdom, in the centre of the prov. of Ulster, having N. and E. the county of Antrim, SE. Down, by which it is merely touched, S. Armagh, W. Tyrone, and NW. Londonderry. It is about 17 m. in length, by about 9 m. in breadth; occupying, inclusive of Lough Beg (2,551¼ acres), which is joined to it, an area of 61,626 Irish, or 99,823¾ statute acres, at ordinary highwater-mark. It is fed by several rivers of considerable magnitude, while the Lower Bann is the only channel through which its refluent waters find a passage to the sea. Though by far the largest, it is by no means the most beautiful of the Irish lakes. Its shores consist mostly either of a level strand, or marshy border, liable to frequent floods; and are of course deficient in those varied banks, and bold promontories, without which such extensive sheets of water want picturesque effect, except when their uniformity is broken by islands; and of these there are only two small and uninteresting ones in this lake. Frequent squalls and want of shelter render its navigation rather dangerous for sailing vessels; but these inconveniences will most probably be obviated by the introduction of steam packets. The mean level of Lough Neagh is about 38 ft. above that of the sea; and it is said that nearly 10,000 acres of land contiguous to its banks, now annually flooded, might be made available for agricultural purposes, by the outlay of a moderate sum on the removal of some obstructions in the channel of the Lower Bann. Its waters are celebrated for their petrifying quality.

NEATH, or NEDD (the an. *Nidum* of Antonine's Itin.), a parl. and mun. bor., market town, and par. of S. Wales, co. Glamorgan, and hund. its own name, on the Neath (crossed here by a stone bridge), 7 m. ENE. Swansea, and 159 m. W. by N. London. Pop. of parl. bor., 6,810 in 1861. The town, situated in a picturesque valley on the E. side of the river, is poor in appearance: the streets are narrow, and badly paved; there are few good houses, but the cottages of the poor extend irregularly beyond the town, particularly on the Cardiff road. The town-hall is a handsome modern building, the lower part of which is used for a corn-market: a church, with a lofty square tower, and six places of worship for dissenters, are the only other public edifices. There are two national schools, two Sunday schools, and two infant schools.

Neath is situated in the immediate vicinity of an extensive copper, iron, and coal district, and it depends in a great measure on the great smelting-houses and foundries that have been established round it, chiefly on the W. bank of the river. The commerce of Neath is very considerable, and has been steadily increasing for some years; but though vessels of 300 tons can get up to the town, the trade is generally carried on by barge-communication with Britton Ferry, which is about 2½ m. lower down the river, and is connected with Neath by a canal running northward, 12 m. higher up the valley. By Britton Ferry, in fact, Neath acts as the vent of all the mineral districts connected with the vale. Another canal joins the last-mentioned at Aber-dulais, and terminates in a sea-lock and basin on the E. side of Swansea harbour. The exports are coal, culm, copper, iron, iron castings, fire-bricks, oak bark and timber; the imports

Digitized by Google

comprising copper and iron ore, corn and flour, and foreign timber.

Neath is a bor. by prescription, and has been governed since the Municipal Reform Act by a mayor and 3 aldermen, with 12 councillors: it has also a commission of the peace under a recorder. Before the Reform Act, Neath was a contributary bor. to Cardiff: that act annexed it, with Aberavon, Kenfig, and Loughor, to Swansea, which sends 1 mem. to the H. of C. At the same time the electoral limits were so enlarged as to include, with the old bor., that portion of the suburbs on the W. side of the river. Registered electors of district, 1,920 in 1865. Neath is also one of the polling-places at elections for the co., and the petty sessions for the hund. are held here, as well as the quarter sessions alternately with 3 other towns. Markets on Wednesday and Saturday; fairs, July 3, September 12, and the first Thursday after Trinity Sunday.

About 1 m. from the town, on the low ground bordering the river, are the ruins of Neath Abbey, founded by Richard de Granville in the 12th century: the church is a mere heap of ruins; but the chapter-house, a curious specimen of Early English architecture, is still in tolerable preservation; and foundations of buildings may be traced to a considerable distance.

NEGAPATAM, a decayed town of Hindostan, presid. Madras, distr. Tanjore, and the residence of the British collector for the district, on the shore of the Bay of Bengal, 162 m. S. by E. Madras. The European town, which was formerly the cap. of the Dutch possessions in the Carnatic, now scarcely exists, Negapatam being seldom resorted to, except by ships, for water and provisions, both of which are plentiful. The native town is tolerably extensive and regular, and on its N. side is a remarkable tower 80 ft. high, the origin of which is unknown, but which is very useful as a landmark. The anchoring ground here is about 3 m. from shore. Negapatam was taken by the English in 1781.

NEGOMBO (*Nagambhu*, 'the land of serpents.') A sea-port town of Ceylon, on the W. coast of that island, 20 m. N. Columbo, and beside the canal, from the latter city to Calpentyn. Lat. 7° 11′ N.; long. 79° 44′. It has a small fort, and several ranges of European buildings; and is principally inhabited by Dutch families in reduced circumstances, attracted thither by the cheapness of provisions, and the salubrity of the climate.

NEGROPONTE, or EGRIPO (an. *Eubœa*), a long, straggling island of the Grecian Archipelago, lying close to the E. coast of Greece, and forming, with the Sporades, a separate nomarchy of its own name. Length, 110 m.; breadth, from 5 to 26 m., the widest part being measured from Chalcis to C. Kiii: area, 1,480 sq. m. Pop. 66,130 in 1861. Eubœa is very similar in its mountainous character and geological constitution to the neighbouring continent, from which it seems to have been separated by some sudden convulsion of nature. Grey limestone and clay-slate are the chief stratifications, and there are clear indications both of old and more recent volcanic action. The whole country is bold and rugged, with a bluff coast, especially on its E. side, which is dangerous to navigators; the highest points of the mountain-range, proceeding from N. to S., through the island, are Mount Lithada, 2,837 ft. high; Mount Kandili, 3,967 ft.; Mount Delphi (an. *Derphossus*), 5,725 ft., and St. Elias d'Oro (an. *Ocha*). The soil of the slopes near the shore is very fertile, but only imperfectly cultivated. The orange, citron, almond, and other trees peculiar to the climate of Greece, grow abundantly on the lowlands; while the chesnut, oak, and fir skirt the regions nearer the mountains. The staple produce of the N. part of the island consists of grapes, from which the farmers make large quantities of a thin red wine, very commonly drunk in Greece, and fetching, according to Colonel Leake, about 5 piastres per barrel. Corn and olives are raised chiefly in the S. districts, but the island has lost the character which it anciently held of being the granary of Greece. (Comp. Thuc., i. 2, with Herod., v. 77.) Excellent herbage for grazing is found in the more elevated lands, but oxen are bred only for farming purposes. Sheep, however, are numerous, and of an excellent breed, furnishing large quantities both of wool and cheese.

The chief town and port of Eubœa is Chalcis, or Egripos (lat. 38° 30′ N., long. 23° 54′ E.), on the Euripus, or channel of Talanti, where it is only 40 yards wide, and crossed by a bridge, supposed to have been erected by Mahmoud Pacha in 1462. The town (which, according to Strabo, was founded by the Athenians before the Trojan war) is walled and strongly fortified, comprising numerous ancient fragments, but few of them are sufficiently large to be intelligible. It has also 2 tolerably good harbours, one of which on the N. side, though small, is deep, secure, and capable of containing many merchant ships. The only other town of Eubœa is *Carystus*, or Castel Rosso, a fortified post near its S. extremity, with 2,000 inhabs. There are, also, numerous villages.

The most ancient name of Eubœa was Macris; but it was also known, at different times, by the various appellations of Ocha, Ellopia, Asopis, and Abanti. Its inhabs., called Abantes by Homer, were among the earliest navigators of Greece, and, according to Heredotus, joined the Ionian colonists on the coast of Asia Minor. (i. 146.) They also founded settlements at a very early period in Illyria, Sicily, and Campania. Soon after the expulsion of the Pisistratidæ, the island became a dependency of Athens, but recovered its liberty, after a hard struggle, in the 21st year of the Peloponnesian war. It afterwards became attached to the Macedonian interests, and was taken by the Romans from Philip, the son of Demetrius. It then gradually declined in pop. and importance; and Pausanias alludes to its fallen state under the emperors. At the dismemberment of the Eastern empire by the Franks, the Venetians obtained possession of Eubœa; but were expelled from it, in 1470, by the Turks, who held it till the formation of the new kingdom of Greece in 1829.

NEJIN, a town of Russia in Europe, gov. Tchernigoff, cap. district, on the Oster, 400 m. SW. Moscow, lat. 51° 2′ 45″ N., long. 31° 49′ 45″ E. Pop. 17,200 in 1858. The town is surrounded by a rampart, most of its houses are of stone, and it is one of the handsomest, best built towns of Little Russia. It has several churches, 2 convents, a hospital, and a grammar school founded by Prince Bezborodko. It produces silk, soap, leather, and preserves and liqueurs that are highly celebrated all over Russia. It is also the entrepôt of a considerable portion of the commerce carried on between the provinces on the Baltic and those on the Black Sea. Its merchants are principally Greeks, who enjoy certain peculiar privileges, but they are partly, also, Armenians and Jews. It has several well frequented fairs.

NEILGHERRY HILLS, or NEILGHERRIES, a collection of mountains of S. Hindostan. See MADRAS.

NEISSE, a fortified town of Prussian Silesia, reg. Oppeln, on the river Neisse, which divides the city into 2 parts, in a marshy district, 48 m. SSE. Breslau, on a branch of the railway from Breslau to Cracow. Pop. 18,747 in 1861, excl. of

Digitized by Google

garrison of 5,390. The town is well built, having been greatly enlarged by Frederic II., who also constructed its best fortifications. It is entered by 3 gates, and comprises among its public buildings a large castle, a commandant's residence, district hall, 7 Catholic and two Calvinist churches extensive barracks, powder-mills and arsenals, a small theatre, 2 hospitals, two high schools, a Catholic gymnasium, a poor school, and an asylum for poor Catholic clergy (called *domus emeritorum*). Neissa is the seat of a council for the circle, a tribunal for the principality, a board of taxation, and a consistory court: it has some printing establishments, manufactures of linen and woollen cloths, several distilleries, and a few good hotels. Large yearly fairs are also held here.

NELLORE, a town of British India, presid. Madras, cap. distr. of same name, on the Pennar, 13½ m. from the Bay of Bengal, and 100 m. N. by W. Madras. It was, in the last century, a fortress of considerable strength; and is still a populous and busy town, about ¾ m. in length, full of shops well stocked with commodities, though without a single public or private building of note. The suburbs without the walls are large. The residence of the collector is on an elevated ridge S. of the town. A curious discovery was made here in 1787, of a number of Roman gold coins and medals, enclosed in a small pot under the ruins of a Hindoo temple. Many had, unfortunately, been sold and melted; but about 30 were preserved, and found to be of the second century, mostly Trajans, Adrians, and Faustinas.

NEMEA, an ancient town of Greece, famous for the games celebrated in its neighbouring grove, but now marked only by the modern village of Agio-Georgio, 12 m. SW. Corinth, and 10 m. N. by W. Argos. The extant ruins of the town, or village (for Pausanias terms it merely a χωρίον), comprise fragments of a temple of Jupiter, a church, and a few blocks and broken Doric pillars, supposed to have formed parts of the tomb of Opheltes. Of the temple 'three columns only are standing, two of which, belonging to the space between the antæ, support their architrave. These columns are 4 ft. 6½ in. in diameter, and nearly 32 ft. high, exclusive of their capitals. The temple was hexastyle and peripteral, being supposed by Mr. Wilkins to have had 14 columns on the sides.' The lower part of the walls, enclosing the cella, is complete, and the pillars, of which there are numerous fragments, have fallen in such regular order, that the temple appears to have been destroyed by an earthquake, rather than by the lingering and desultory decay of time. Mr. Dodwell (Greece, ii. 208) says: 'I have not seen in Greece any Doric temple, the columns of which are so slender, and the capitals so disproportionately small, as those of Nemea: the whole is of soft calcareous stone, and the columns are coated with a fine stucco.' Sir W. Gell mentions, also, 'that there are indications of the Nemean theatre at the foot of a neighbouring hill; and probably vestiges of the stadium and hippodrome might be discovered by a search similar to that instituted at Herculaneum and Pompeii.' (Itin. of Morea, p. 159.)

Nemea was celebrated in mythical history as having been the scene of the first labour of Hercules in destroying the Nemean lion; and the den of this animal was pointed out to travellers even in the time of Pausanias, near the end of the second century of the Christian æra. The games are of doubtful origin; but the national mythology ascribes them to the respect entertained for the memory of Opheltes or Archemorus, son of Lycurgus, a king of Nemea. They were celebrated in the grove of Molorchus, and are thus alluded to by Statius (Theb., iv. 159):—

> 'Dat Nemea comites et quos in prælia vires
> Sacra Cleonæi cogunt vineta Molorchi.'

With respect to the periods at which these festivals were celebrated, different accounts are given by the old writers; but the most consistent statement is, that they were celebrated triennially, in the Athenian month *Boedromion*, corresponding with the modern August. The Argives were the judges of these games, which comprised boxing and athletic contests, as well as chariot races; and the conquerors were crowned with olive till the time of the Persian war, when, in consequence of the losses that the Argolic republic had sustained in that struggle for independence, smallage, a funeral plant, was introduced in its stead. It appears from Polybius and Livy (xxvii. 30), that the games were in a flourishing state in the reign of Philip, son of Demetrius, in the second century preceding the Christian era. It may be inferred, however, from the slight mention that Pausanias makes of the Nemean games, that they had in his time fallen into great neglect.

NEMI, a village and lake of Central Italy, in the Comarca di Roma. The village on the NE. bank of the Lago di Nemi is 2 m. NE. Albano, and 16 m. SE. Rome. Nemi, so called from the forest, or *nemus* by which it was anciently surrounded, was famous in antiquity for the worship of the Scythian Diana—*nemus glaciale Trivia*—to whom human sacrifices were offered. No remains that can with certainty be ascribed to the temple dedicated to the goddess are now to be met with. The Lago di Nemi is 1,022 ft. above the level of the sea; and is now, as of old, beautifully sequestered, and well entitled to its classical epithet of *Speculum Dianæ*. But its principal celebrity in modern times has been derived from the discovery at its bottom, in 1535, of the remains of a very large ship, 500 ft. in length, constructed by one of the early emperors, most probably for some of the *naumachia*, or sham sea-fights, exhibited on the lake.

NEMOURS, a small town of France, dép. Seine-et-Marne, cap. Canton, on the Loing, 18 m. S. by E. Melun. Pop. 3,734 in 1861. The town is surrounded by the river and the canal du Loing, and inclosed by walls. It is well built, and has a fine old castle, which now serves for several public institutions, including a public library of 10,000 vols.; several suburbs, a hospital, a small theatre, and a handsome bridge over the Loing. It has some large tanneries and leather factories, and a brisk trade in agricultural produce. The seigniory of Nemours was given to the house of Orleans by Louis XIV.

NENAGH, an inland town of Ireland, prov. Munster, co. Tipperary, near the Nenagh river, an affluent of the Shannon, within 4½ m. of that river, 82 m. WSW. Dublin, on the Great Southern and Western railway. Pop. 6,282 in 1861. The town is situated in a rich and fertile portion of the co., and was once defended by a strong castle, now in ruins. The principal streets are well and regularly built, and it is decidedly the best town between the cities of Dublin and Limerick. It has a church, a R. C. chapel, Methodist and Independent meeting-houses, an endowed and a national school, a fever hospital, a dispensary, and a large infantry barrack. General sessions are held twice a year, and petty sessions weekly. It is a constabulary station. Its contiguity to the Shannon, or rather to its enlargement called Lough Dergh, gives it considerable advantages, and has made it a market for corn and cattle. Markets on Thursdays; fairs

Digitized by Google

on 24th April, 29th May, 4th July, 4th Sept., 10th Oct., and 1st Nov.

NEOT'S (ST.), a market town and par. of England, hund. Toseland, co. Huntingdon, on the Ouse (crossed here by a handsome stone bridge), 8 m. SSW. Huntingdon, and 49 m. N. by W. London, on the Great Northern railway. Pop. of par. 3,321 in 1861. Area of par. 4,750 acres. The town comprises 3 or 4 respectable streets, intersecting each other, with a large market-place. The church is a fine building in the perpendicular English style, with large windows of painted glass and an elegant tower, 150 ft. high, at its W. end. There are also places of worship for dissenters, and Sunday schools. It has also an endowed school for 25 boys, and a large paper-mill; but the principal dependence of the inhab. is on the retail trade with the surrounding district. Markets on Thursday, 3 large horse and cattle fairs; and a statute fair on Aug. 1.

NEPAUL (Hind. *Nepala*), a kingdom of N. Hindostan, extending through 8 degs. of long., and comprising a great portion of the S. declivity of the Himalaya chain. It lies between lat. 26° 30′ and 30° 50′ N., and long. 80° and 88° E., having N. and NE. the table-land of Thibet, E. the territory of Sikkim, and elsewhere the British territories. Length, E. to W., about 500 m., average breadth, rather more than 100 m. Area estimated at 53,000 sq. m.; and pop. at 2,000,000. This country may be divided into four regions, according to its elevation. The lowest, or *terriani*, is a part of the great plain of Hindostan. In a few places, the British districts reach to the base of the mountains, but, in most parts, the Nepaul dominions stretch for about 20 m. into the plain. This region is not wholly level, but undulating, and comprises a good deal of poor land, overgrown with trees and bushes of little value; but there is also a large proportion of rich land, and, upon the whole, the soil is much better than in the adjacent parts of the British territory, the products being, however, nearly the same. The surface here is intersected by numerous small rivers, which not only serve for watering the crops, but, in the rainy season, are used for the transit of agricultural produce to the markets of British India, and to float down the valuable timber of the forests. The very name *terriani* (or *tariyani*), implies, indeed, the country's being navigable. Bounding this region on the N. is another of nearly the same width, consisting of small hills composed chiefly of clay, intermixed, however, with many primary rocks.

The lower portion of this region, with a part of the last-named, is the grand site of the saul forests, among which are many sissoo and toon trees. Higher up the hills are covered with a great variety of trees; and in the N. are many pines and mimosas, from which catechu is obtained. In this region are many fine valleys, some of which are tolerably cultivated; while others, though possessing a very rich soil, are almost wholly neglected. A few straggling villages are scattered through the woods, the inhab. of which grow cotton, rice, and other articles with the hoe, having first cleared away the trees. The third region is that of the mountains, which rise so high as to be covered with snow for a great part of the year, and are divided by valleys, rising to from 3,000 to 6,000 ft. above the great plain of Hindostan. Of course, these valleys differ very much as to temperature; some abound with rattans and bamboos, and ripen the sugar-cane and pine-apple; while others produce only barley, millet, and other grains of cold countries; and oaks and pines are their only forest trees. The breadth of this belt or region generally may be from 30 to 40 m. N. to S., though further W. it is probably greater. The fourth, or Alpine, region is probably of nearly equal extent, and consists of immense rocks, rising into sharp peaks and tremendous precipices, which, where not perpendicular, are covered with perpetual snow, and almost constantly involved in clouds. The interior, or most lofty chain of the Himalaya, forms the farthest boundary of Nepaul to the N.; through which, however, are several passes into Thibet, while several tributaries of the Ganges, which intersect this country, are supposed to rise on the N. side of the main chain.

The land in the third or mountain region is considered the most valuable in the country, and is that in which all the officers and servants of the crown are paid, and from whence all endowments are made. From the abundance of rain in the warm season (for the periodical rains extend to Nepaul with nearly the same violence and duration as in Bahar), the land here, considering the inequality of surface, is uncommonly productive of grain. Wherever it can be levelled into terraces, however narrow, it is exceedingly well suited for transplanted rice, which ripens after the rains have ceased, so that the harvest is never injured; and as most of these terraces can be supplied at pleasure with water from springs, the crops are almost certain. In some parts the same land gives a winter crop of wheat and barley, but in most parts this is judiciously avoided. Where the land is too steep for terraces, it is generally cultivated after fallows with the hoe, and produces rice (sown broadcast), maize, cotton, several kinds of pulse, a kind of mustard, Indian madder, wheat, barley, sugar-cane, and a large species of cardamom; and in the country between Nepaul Proper (the valley of Catmandoo) and the Kali, ginger is a valuable product; but transplanted rice may generally be considered as half the entire produce. The sugar-cane is planted in considerable quantities in the valley of Nepaul Proper, and it seems to thrive. Most European kitchen vegetables have been introduced; but they are only to be found in the gardens of men of distinction, and in very small quantities. From the abundance of rain, the climate is not favourable for many kinds of fruit, the heats of spring not being sufficient to bring them to maturity before the rainy season sets in, as is the case in Bengal. Peaches grow wild by every rill, but the one side of the fruit is rotted by the rain, while the other is still green. The grapes are also bad from the same cause.

The pasture on the mountains, though not so harsh and watery as that of the low country, is by no means good, and is said to be inferior to that even of the heaths of Scotland. The pastures are in general common. Nothing is paid for pasturage; but as it is scarce, and as the principal tribes do not employ cattle in agriculture, very few are bred in the country. Buffaloes and goats are imported from the low country; and horses, yaiks (*Bos grunniens*), shawl-goats, common goats, and sheep, are brought from Thibet, and become tolerably fat on the hills. The buffaloes furnish good beef. The shepherds of some tribes are provided with numerous flocks. In winter they retire to the lower mountains and valleys; but in summer they ascend to the Alpine regions, and feed their herds in the vicinity of perpetual snow. The sheep which these people possess are very large, and have fine wool, which is woven into a cloth finer than that of Bootan: they give also an abundance of milk, from which is made a kind of cheese.

Digitized by Google

The lands in Nepaul Proper have been long divided into *khats*, or fields, each of which, in ordinary seasons, produces about 234 bushels of paddy, or rice, in the husk, which, on the supposition that each khat is equivalent to 8¼ English acres, would be at the rate of 28 bushels an acre. The arable lands are partly retained as the property of the court, for defraying the rajah's household expenses; but the produce of the land so employed is not sold, but serves for the consumption of the court, and for distribution in charity at the temples and among religious mendicants. But by far the greater portion of these lands are let to tenants, or granted in feu for military service; and the rent of the lands let, as in the former case, forms a principal portion of the rajah's revenue. Landholders who do not cultivate their own estates, in general let them for half the produce. The persons who rent lands from the owners are of two kinds: the *kuriyas*, who occupy free land, and are exempted from any services to government, except the repair of roads, &c.; and the *prajas*, who occupy the crown land, whether that be held by the prince, or granted for military service. Most great proprietors, however, like the rajah, employ stewards, with their servants and slaves, to cultivate land for the supply of their families. Money-rent for land can seldom be procured, and is very low, only from 4 to 12 annas being paid as a fixed rent in money for land capable of producing a crop, the half of which is worth about 50 annas.

But when the lands are alienated for sale, they fetch from 1,600 to 2,000 *mohurs* a khat, which high price is owing to the very small quantity of land that is brought to market. The agricultural implements are very inferior, and almost comprised in an awkward kind of hoe, a weeding-iron, and fans for winnowing the corn. In Nepaul, however, they have made a further progress than in India, by the introduction of water-mills for grinding corn.

The mountain region of Nepaul contains a good deal of iron, copper, lead, and some zinc, the first three being found quite on the surface. The copper ore is dug from trenches open above, so that the workman cannot act in the rainy season, not having sagacity to make a drain. Each mine has attached to it certain families, who seem to be a kind of proprietors, as no one else is allowed to dig. The total quantity of ore dug by each miner may be estimated at 2,000 lbs. a year. This is delivered to another set of workmen, by whom it is smelted and wrought, the rajah, to whom the forests mostly belong, furnishing the materials for the charcoal. The ore yields, at an average, 62½ per cent. of metal, 1-3d of which becomes the share of the rajah, 1-3d that of the miner, and 1-5th the share of the smelter; the remainder is divided among the rajah, the miner, and the keeper of the accounts, who usually advances a subsistence to the whole working party, and often furnishes loans even to the rajah. Iron-ore is found near the surface, and is wrought nearly on the same principle as copper, the miner receiving 1-3d part of the produce. Some of the iron is so excellent that, even without being converted into steel, it is made into knives and swords. Only 2 lead mines are now wrought; but lead is found in many parts of the country close to the surface, and it contains much silver. There are numerous sulphur mines; but some have been deserted on account of their injurious effects on the workmen. Corundum, here called *Kurran*, is found in great quantities on the hills of Isma and Musikot; but the masses, which always lie close to the surface, are much smaller than those in the British territory, and seldom exceed 4 or 5 lbs. in weight.

The most extensive manufacture of Nepaul is that of coarse cotton cloth, woven by the native women of all ranks, and by the men of the Parbatiya caste. These cloths constitute the dress of the middle and lower classes of people, though woollen would be better suited to the temperature of a Nepaul winter. All those, however, who are not very poor, cover themselves with woollen blankets imported from Bootan. The entire dress of the higher ranks is of foreign manufacture, and comprises Chinese silks and shawls, with muslins and calicoes from the low countries. The military alone wear European broad cloth. There are also at Lalita-Patan and Bhatgong extensive manufactures of copper and brass goods, as well as of bells, made from a mixed metal, called *Phul*: these, with iron vessels and lamps, are exported in large quantities to Thibet. A strong paper is made at Bhatgong, from the bark of the *Daphne papifera*; but the supply is insufficient for the home consumption, and paper is imported from Bootan.

The trade of Nepaul was formerly considerable, though the rajah's territories produce few articles for exportation, except metallic wares and drugs; but at present the badness of the police, and total want of credit, owing partly to the weakness of the law, and partly to the falsehood of the people, operate as a great hindrance to commercial intercourse. The merchants of Cashmere carry their goods, by way of Leh, to different parts of Thibet and W. China, exchanging them for goats' hair, tea, and silks: they also send to China other skins, to the value of about 50,000 rupees a year, procured chiefly from the neighbourhood of Dacca, in Bengal. The merchants of Bootan and Thibet bring to Catmandoo paper, coarse woollen cloths, horses, shawl-goats, sheep, horned cattle, *chaungri*, musk, salt, sal-ammoniac, yellow arsenic, borax, gold dust, silver, and preserved fruit; much of which is again exported to Patna, in exchange for buffaloes and goats, broad cloths, cutlery, glass ware, and other European articles, Indian cotton cloths, mother of pearl, coral, pepper and other spices, camphor, tobacco, and *phagu*, a red powder thrown about by the Hindoos at their festivals. Most of these articles, with metallic utensils and bells, are sold to the merchants of Thibet. The money of Nepaul consists of *damas*, 4 of which are equal to 1 *paisah*; 4 paisahs = 1 anna; and 8 annas = 1 mohur. Gold coins are called *ashruffies*; but the half ashruffy, = 12½ mohurs, is the highest piece now coined: it weighs 84¼ grains, and is worth nearly 6*s.* 3*d.* at the mint price of Calcutta. The mohur is the common silver coin of the country, and is worth about 4-10ths the Calcutta rupee. The paisah and half-paisah are the principal copper coins. Grain is sold by measure, 1 *muri* being equivalent to 2½ Winchester bushels.

The Nepaulese government, which for many years has been monopolised by the tribe called Ghoorkas, is essentially despotic, modified, however, by certain observances enjoined by immemorial custom. The *Dharmachastra* forms the basis of jurisprudence both in civil and criminal cases, the principal punishments being by fines, confiscations of property, banishment, degradation of caste, maiming, and death by hanging as well as flaying. Women are never put to death, but are subject to mutilation and torture. The provs. are governed by *subahs*, who are the supreme officers of revenue, justice, and police; each farms the revenue of his own district, and either collects it on his own account, or underlets it to *izaradars*. The amount paid by the subahs, however, forms by no means the whole of the royal revenue; for,

Digitized by Google

besides compulsory presents made by all visitors of the court, a general income-tax is levied on all classes, according to the exigencies of the state. Nepaul Proper is governed by a rajah, assisted by the *bazadar*, or council of the 12 great officers of the court; for the support of which Catmandoo pays 18,000 rupees: Lalita Patan 18,000; Bhatgong, 14,000; and Kirthipoor, 7,000. Each farm is assessed at a certain quantity of grain, which may be paid either in kind or in money at the market price. A large proportion of the valley, however, has been alienated either in fee or as charity land. A town called Sanghoo, worth annually 4,000 rupees, is the jointure of the queen-regent, and Dewapatan, which is still larger, belongs wholly to certain temples. The religion of the Nepaulese is Buddhism; but in the distinctions of caste and the nature of the priesthood there are essential differences between the religion of the Buddhists of Ava and that professed by those of Nepaul, both of whom are held in equal abhorrence by the Brahmins of Bengal.

The pop. of Nepaul comprises numerous tribes, partly of Mongol and partly of Hindoo descent. The Magars, who occupy the hills in the W. part of the kingdom, form the greater part of the rajah's army, and the Gurungs, who employ themselves either in mining or pasturage. The Newars live in the plain of Catmandoo, and devote themselves to agriculture and the useful arts. They are of middle size, with broad shoulders and chest, flat faces, small eyes, and spreading noses, with a sallow complexion. The grand basis of subsistence in Nepaul is rice, with which the poorer classes eat raw garlic, radishes, and lentils: those in more easy circumstances add oil or *ghee*; and the rich eat a great deal of animal food. Even the poorest are occasionally able to sacrifice a pigeon, fowl, or duck, which they afterwards eat. The rajpoots of Nepaul, indeed, are so fond of animal food, that, to the astonishment of the Bengalese, they drink the blood of a sacrifice as it flows from the victim. All classes drink spirituous liquors, to which they are excessively addicted. Most of the Nepaulese domestic servants are slaves, the price of which varies between 30 and 40 mohurs. Even some of the Brahmins are slaves to the rajpoots; but they are not degraded, and are employed in great families either as cooks or in the service of the private chapels. All other ranks are sold as common slaves, and persons of the best families have often been deprived of their caste; but this is not usual, as the Nepaulese are particular in maintaining the distinction of castes. Most of the slaves have been born free: a few, perhaps, have been degraded on account of crimes; but by far the greater number have been sold by necessitous parents. The female slaves, even those of the queen, are *domne libere*, compelled to sell their favours for clothes, no allowance being made to them by their masters except a little rice. Hence they seldom have children, and beggary is the usual lot of the old and infirm. The queen's slaves form her bodyguard, and follow her on horseback armed with swords, and riding like men. The ordinary language of Nepaul is the Prabratiya, or mountain-Hindoo dialect, which is continually becoming more prevalent, and in some districts has already superseded the language of the native tribes: it is exclusively spoken by the reigning family and the higher castes. The Newars have a language peculiar to themselves, quite different from that of their neighbours, and alleged to possess a copious literature.

Nepaul, which was formerly divided among numerous independent princes, became united by conquest in the middle of the last century under the sovereignty of a chief of the Ghoorkas, who in about 40 years subjected all the countries between the Sutledje westward and Bootan on the E. The aggressions of the Ghoorkas on the Chinese territory were stopped, in 1792, by an army of 70,000 men, who, after many victories, advanced within 25 m. of Catmandoo, and obliged the rajah to make an ignominious peace. The Ghoorkas afterwards turned their arms against the British, who, after a war of two years, obliged them, in 1816, to cede all the countries between the Sutledje and Kali, as well as to evacuate the territories of the Sikim-rajah. Active symptoms of hostility to the English were displayed in 1839, but these were checked by the events of Affghanistan.

NEPI (an. *Nepete*), a town of Central Italy, prov. Viterbo, 25 m. NNW. Rome. Pop. 2,600 in 1861. The town is beautifully situated, and surrounded by a high Gothic wall, partly founded on the original walls erected by the Etruscans. It has numerous churches and convents, and a fine modern aqueduct, but a gloomy and desolate appearance within. Some Roman antiquities exist here. Conjoined with Sutri, Nepi constitutes a bishop's see.

NERAC, a town of France, dép. Lot-et-Garonne, capital arrond., on the Baise, a tributary of the Garonne, 16 m. SW. Agen. Pop. 7,283 in 1861. Nerac is divided into the old and new town, one on either bank of the river, here crossed by two stone bridges. The old town, on a steep declivity, and partly surrounded with Gothic walls, is ill built and gloomy; but the new town, on a level site, and encircled by promenades, is well laid out and handsome. Nerac has the remains of an extensive castle, said to have been constructed by the English, a fine par. church, a large hall, and several other good public buildings. One of the promenades has a good statue of Henry IV., who passed most part of his youth in the castle of Nerac. This town has manufactures of coarse woollens, ship biscuit, and corks; and a good deal of trade in linen fabrics, corn, flour, wine, and brandy. Numerous Roman antiquities, including baths and other edifices, medals, and inscriptions, have been discovered at Nerac, from which it would appear that it was anciently called *Aquæ Neræ*, and was either founded or greatly embellished by Tetricus, in the reign of Gallienus.

NERBUDDAH (*Narmada*, 'The bestower of pleasure,' called by Ptolemy the *Namadus*), a river of Hindostan, extending through 9 degs. of long. in the N. part of the Deccan. It rises in the table-land of Gundwanah, lat. 22° 40′ N., long. 81° 45′ E., near the sources of the Sone and Mahanuddy. It has a general W. direction, with fewer windings than most Indian rivers; and, after a course of about 700 m., falls into the Gulf of Cambay, lat. 21° 36′, long. 72° 50′, 28 m. W. Baroach. It varies considerably in breadth; being 600 yards across, near Jubbulpoor, in long. 80°, and 1,200 yards at Mundleysir, 210 m. from its mouth; while above and below Baroach, it sometimes expands to a breadth of 3 m. At its source the Nerbuddah may be 2,460 ft. above the level of the sea: its total rate of descent will be, therefore, nearly 3½ ft. in a mile. During its passage it is greatly obstructed by rocks, islands, shallows, and rapids, which render its navigation in most parts difficult or impracticable through the provs. Gundwanah and Malwah; but, after entering Gujrat, it becomes navigable for small craft for about 100 m. from the sea. The Nerbuddah is joined by no affluent of any consequence. For so considerable a river its basin is remarkably narrow and restricted; it being enclosed on the N., for the most part, by the Vindhyan mountains, and on the S. by the

Digitized by Google

Santpoora and other parallel ranges, which are seldom more than from 50 to 60 m. from the former. The valley through which it flows consists of fertile alluvial soil, in which many fossil remains have been found. Mundlah, Gurrah Warrah, Hussingabad, Hinda, Mheysur, and Baroach are the principal towns on this river. By the war of 1817-18, the British obtained an extent of nearly 30,000 sq. m. of the country watered by this river from the rajah of Berar, which, under the term of 'Ceded Districts on the Nerbuddah,' has been annexed to the Bengal Presidency.

NETHERLANDS. See HOLLAND.

NETTUNO, a small sea-port of Southern Italy, in the Campagna and Comarca di Roma, 31½ m. SSE. Rome. Pop. 3,000 in 1862. The town seems to have derived its name from an ancient temple dedicated to Neptune, and is built round the bastions of a fortress. It has now but little activity or commerce, owing to the unhealthiness and depopulation of its vicinity; but in antiquity, under the name of Cœno, or Cerio, it was the port of Antium, the cap. of the Volsci, some remains of which city exist about 2 m. W. by S.

NEUBURG, a town of Bavaria, circle Swabia and Neuburg, on the Danube, here crossed by two bridges, 28½ m. NNE. Augsburg, and 45 m. WSW. Ratisbon, on the railway from Ratisbon to Ulm. Pop. 8,276 in 1861. Neuburg is divided into the upper and lower town, and has some remains of its ancient walls, a royal castle, in which many curiosities are kept, an arsenal, a royal institute, a hospital, a gymnasium, and a teachers' seminary. It is neat and well built; and is the seat of the high court of appeal for the circle.

NEUCHATEL, or NEUFCHATEL, a canton in the W. of Switzerland, between lat. 46° 50′ and 47° 10′, and long. 6° 25′ and 7° 5′ E.; having NE. and E. the canton Berne, SE. the Lake of Neuchatel, SW. Vaud, and W. and NW. the dép. of Doubs, in France. Length NE. to SW. 33 m.; average breadth about 9 m.: area, 280 sq. m. Pop. 87,847 in 1860. The Jura chain runs through the canton in its entire length, dividing it into two parts, one belonging to the basin of the Rhine, and the other to that of the Rhone. This mountain range often rises to 5,000 ft. in elevation; and the Chassiral, its highest point within the canton, rises 5,285 ft. above the sea. The valleys extend generally in a longitudinal direction, parallel to the mountains. The principal lakes are those of Neuchatel (which see), and a part of that of Bienne: principal rivers, the Doubs, constituting the NW. boundary; the Reuse, Thielle, and Tyon. The climate varies greatly: the vine is cultivated on the banks of the lake of Neuchatel; but in some of the more elevated valleys the winter is very severe, and on many of the mountains snow remains continuously for seven or eight months. The soil is principally calcareous. Of 256,000 *poses* or arpents of land, which the canton is estimated to comprise, 35,000 are arable, 4,600 vineyards, 58,000 in artificial, and 60,000 in natural pastures, and 45,000 in forests. There are very few large proprietors: the savings of the labouring pop., both agricultural and manufacturing, are generally laid out on the purchase of cottages, with a small portion of adjacent land. Excepting wine and vegetables, this canton does not yield enough of agricultural produce for its own consumption, and the principal part of its supply of corn is imported from the neighbouring cants. of Basle and Berne. Considerable quantities of wine grown around Neuchatel are exported to the neighbouring Swiss cantons. The best wines are those of Cortaillod, Neuchatel, and Boudry. The first in fine years is said to approach pretty closely to Burgundy. Within the last few years the preparation of sparkling wines, sold as champagne, has become a pretty extensive branch of business, from 120,000 to 140,000 bottles being annually exported. A good many cattle are reared, principally cows, and cheese is one of the principal articles of export. Hay is also extensively exported.

Neuchatel is one of the principal manufacturing cantons of Switzerland, especially for watches, printed cottons, and lace. Watch-making, which was introduced early in the 17th century, is carried on to a great extent in the mountainous districts, but particularly in and near Le Locle and Chaux de Fond. It is estimated that from 20,000 to 30,000 hands are employed in this branch of industry, or in manufacturing instruments for the construction of watches. They are exported to France, Germany, Holland, Italy, Spain, America, and Turkey. Mostly all the watches sold in Paris are made in Neuchatel, and the neighbouring Swiss cantons. The capital employed in the watch trade has been estimated at upwards of 4,000,000*l.* sterling. It is difficult to ascertain the ordinary rate of wages, workmen being generally paid by the job, and not by a stipulated salary. Lace-making formerly employed from 5,000 to 6,000 hands; but it has declined, and many persons formerly engaged in it have embraced some branch of watch-making. The printed cotton manufacture was established early in the last century, towards the latter end of which it was in its most flourishing state. At present most of the cotton cloths printed in Neuchatel are furnished by Zürich and other Swiss cantons; and only about 1,000 men, women, and children are employed in this manufacture. Hosiery, cutlery, mathematical instruments, and metallic wares of various kinds are among the other manufactures of the canton.

The administration of justice is both prompt and economical. There are 21 courts of primary jurisdiction, and 2 of appeal, at Neuchatel and Vallangin. The laws are, in many respects, similar to those formerly prevalent in Burgundy. The inhabs. speak a French dialect; they are Protestants, except about 3,000 individuals under the authority of the bishop of Lausanne. Public instruction is very generally diffused, few individuals being ignorant of writing and arithmetic. There are colleges in Neuchatel, the cap., and Chaux de Fond, and schools of watch-making and other arts in those towns and Le Locle. Many societies for instruction, and benevolent purposes, exist. The militia comprises all males between the ages of 18 and 50. The public revenues, derived from rents, a small tithe or land tax, posts, turnpikes, salt and auction duties, amounted in 1861 to 1,056,494 francs, and the expenditure in the same year to 1,127,385 francs.

Neuchatel belonged, in the 11th century, to the German emperors, and was ceded to Burgundy by Rodolph of Hapsburg. In 1406 the town of Neuchatel entered into a treaty with Berne, and soon after allied itself to the Swiss confed. In 1707, the last direct inheritor of this territory dying, the states chose the king of Prussia for their sovereign. Napoleon created Neuchatel into a principality, which he conferred on Marshal Berthier. The canton reverted to Prussia in 1814, but in the year 1848 it withdrew its allegiance, and became an independent member of the Swiss confederation.

NEUCHATEL (Germ. *Neuenburg*), a town of Switzerland, cap. of the above canton, on the NW. shore of the Lake of Neuchatel, 17 m. NW. Freyburg, and 45 m. ESE. Besançon, on the rail-

Digitized by Google

way from Solothurn to Lausanne. Pop. 10,328 in 1860. The town is built upon the steep slope of the Jura mountains, and along a narrow strip of level ground between the hills and the lake. Its objects of curiosity comprise the castle, formerly occupied by the French princes of Neuchatel; the church, a Gothic edifice of the 12th century; the town-hall, in which the *audiences générales* meet; and the gymnasium, with a museum of natural history. Its charitable institutions are on a large scale; a hospital and poor-house was founded and endowed with a sum of 166,000*l.* by a townsman; and another, the Hôpital Pourtales, is also an extensive establishment, and open to all persons without respect of country. It has, also, an orphan asylum, a house of correction, and some public granaries. The *extrait d'absinthe* is produced here, and it has a considerable traffic in the agricultural and manufactured produce of the cotton.

NEUCHATEL (LAKE OF), otherwise called the Lake of Yverdun (Germ. *Neuenburger-See*), a lake of Switzerland, in the W. part of the confed., between the cantons Neuchatel, Vaud, Freyburg, and Berne. It is of an elongated shape; length NE. to SW. 24 m.; average breadth nearly 4 m.; area probably 90 sq. m. The elevation of its surface above the sea is estimated at 1,320 ft.: its greatest depth is 400 ft. Several considerable rivers empty themselves into this lake, which also receives the surplus waters of the lake of Morat. Its own surplus waters are conveyed by the Thiele to the lake of Bienne; and thence to the Aar and the Rhine. Neuchatel, Granson, Yverdun, Estavayer, and Condrefin are on its banks. Its scenery is agreeable, but tame in comparison with that of most other Swiss lakes. Its navigation is sometimes dangerous, from its being subject to sudden gusts of wind.

NEUILLY, a village of France, dép. Seine, cap. canton, on the Seine, here crossed by a handsome stone bridge, on the road from Paris to St. Germains; 1½ m. WNW. the Barrier de l'Etoile. Pop. 13,216 in 1861. The bridge of Neuilly, regarded as the *chef-d'œuvre* of the architect Peronnet has an entire length of 800 ft. (the span across the river being 710 ft.), with five arches, each nearly 128 ft. in breadth and 32 ft. in height. The *château* de Neuilly, built in the time of Louis XV., was a favourite summer residence of Louis Philippe, late king of the French. The village has manufactures of earthenware and chemical products, and distilleries of ratafia.

NEUSATZ (Hungar. *Uj-Videk*), a royal free town of Hungary, co. Bacs, on the Danube, opposite Peterwardein, with which it is connected by a bridge of boats, 46 m. NW. Belgrade. Pop. 19,725 in 1857. The town consists of long straggling streets, but, being of modern origin, some of them are tolerably well built, and they are generally paved. The Greeks have 5 churches, the R. Catholics 1 church, and the Armenians 1; it has also a synagogue, a gymnasium, a R. Catholic high school, and Jewish school. Neusatz is a place of considerable traffic, particularly with Turkey, for which it is chiefly indebted to its position on the Danube, near the influx of its 3 largest tributaries, the Theiss, Drave, and Save. Neusatz is the residence of the Greek bishop of Bacs, and of a *protopapas*. There are remains of a Roman wall stretching from Neusatz to Csurog on the Theiss, 19 m. NNE.

NEUSOHL, a royal free town of Hungary, beyond the Danube, cap. co. of its own name, on the Gran, at the influx of the Bistricza, 80 m. N. Pesth. Pop. 5,661 in 1857. Neüsohl has wide streets, and is a tolerably well built country town, rather imposing in its appearance, because all the houses are in the Italian style, with flat roofs. In the par. church (a Gothic structure) is a bell weighing 100 centners. Neüsohl has an old castle, a hospital, and several superior schools, and is the residence of a bishop, the seat of a mining council and tribunal. Near it are the mines of Herrengrund, producing 1,500 cwts. of copper a year, and some silver; and in the town is the largest smelting-house in Hungary. Neüsohl has also manufactures of sword-blades and beet-root sugar.

NEUTRA, or NEITRA, an episcopal town of Hungary, cap. co., on the Neutra, in a finely-wooded country, 45 m. ENE. Presburg, on a branch of the railway from Presburg to Pesth. Pop. 9,267 in 1857. The town has a castle, a co. hall, a cathedral and bishop's palace, a lyceum, and several high schools; and carries on a considerable traffic in the wine grown in its vicinity.

NEUWIED, a town of Rhenish Prussia, circle Neuwied, of which and of a mediatized principality it is the capital, on the Rhine; 7 m. NNW. Coblentz, on the railway from Coblentz to Cologne. Pop. 7,766 in 1861. The town was founded early in the last century by a count of Wied, on the broad principle of perfect toleration of all sects; in consequence of which a neat and flourishing manufacturing town soon sprung up. It is laid out in squares of houses, formed by 9 streets intersecting each other at right angles. At its W. extremity, overlooking the Rhine, is a castle, the residence of the princes of Wied. The town has, also, several churches and other places of worship, a gymnasium, teachers' seminary, hospital, orphan asylum, house of industry, and a prosperous Moravian establishment. Its manufactures are of silk, cotton, and linen fabrics, and yarn, stockings, iron goods, tobacco pipes, Prussian blue, chicory, potash and soap. It is the seat of the judicial court for the principality, the circle court, and a mining tribunal. The museums of natural history in the castle and in the Moravian establishment are worth notice; but the principal object of interest at Neuwied is its collection of antiquities. These were found in the buried Roman city of Victoria, about 2 m. N. the town, supposed to have been destroyed by the Germans towards the end of the 4th century.

NEVERS (an. *Noviodunum* and *Nivernum*), a city of France, dép. Nièvre, of which it is the cap.; on the Loire, where it is joined by the Nièvre, and a little above the influx of the Allier; 133 m. SSE. Paris, on the railway from Paris to Clermont. Pop. 18,971 in 1861. The city is agreeably situated on the declivity of a hill facing the S., but is in general ill-built and ill-laid out, its streets being narrow, steep, and crooked, and its houses old and gloomy. In its centre, however, is a large and regularly constructed square, on one side of which is the ancient residence of the dukes of Nivernais. Some of the entrances to Nevers are imposing: that from Bourges is ornamented with a triumphal arch, and on the road from Moulins the Loire is crossed by a solid stone bridge of 20 arches. The quays on the river are bordered with good houses, and look clean. The cathedral, on the site of a very ancient church, is an edifice principally constructed between the 12th and 16th centuries. It is large, and has a lofty square tower; in its choir is some fine stained glass. Several other churches, as well as the cathedral, are curious specimens of Gothic architecture. The other public buildings are mostly in a simple but appropriate style: the principal are the barracks, arsenal, prefecture, and public library with 8,500 vols. The park, formerly be-

Digitized by Google

longing to the dukes of Nivernais, has now become one of the many public promenades surrounding Nevers. The city preserves but a few remains of its ancient fortifications. It is the see of a bishop, whose diocese extends over the dép. Nièvre; and is the seat of tribunals of primary jurisdiction and commerce, of a chamber of manufactures, and a communal college. It has several hospitals, a handsome little theatre, 2 episcopal seminaries, schools of drawing and geometry, a free school of arts, a *commission d'antiquité*, and many other scientific establishments. It is also distinguished by its manufacturing industry. It has an imperial cannon foundry, in which from 200 to 250 cannons are cast annually. It also produces chain cables, iron works for suspension bridges, and other heavy iron goods. Nevers has been for many centuries famous for its china-ware, which, for durability and solidity, is said to be the best made in France; it is sent in large quantities to Paris, and throughout the country watered by the Loire and its tributaries. Glass wares, metal buttons, coarse woollen cloths, violin strings, vinegar, glue, brandy, and leather are among the other principal manufactures. It has also a considerable trade in timber for ship-building, charcoal, iron and steel, wine, and salt, being the great entrepôt for the Upper Loire. Its trade is facilitated by a commodious haven at the mouth of the Nièvre. It has 9 annual fairs, one of which lasts 8 days.

This town existed at the conquest of Gaul by Cæsar; it became a bishopric in 506, and the cap. of Nivernais; in 865 it was burned by Hugh Capet; and in the middle ages suffered severely from plague, the inundations of the Loire, the invasions of the English, and religious wars.

NEVIS, one of the British W. India Islands, belonging to the Leeward group; in about lat. 17° 16′, long. 62° 33′ W., separated by a strait 2 m. in breadth, from the SE. extremity of St. Christopher's. Shape circular; greatest length, NE. to SW., 6½ m.; extreme breadth, about the same. Pop. 9,822 in 1861, of whom 4,526 males and 5,296 females. The island consists of a conical hill, rising from the sea to a height of 2,500 ft. Soil mostly a strong tenacious marl, not readily absorbent of moisture: the climate is similar to that of St. Kitt's and Tortola. It is well-watered, and in general fertile. The inhabs. are nearly all occupied in the raising of the sugar-cane and provisions, and in the preparation of rum and sugar. The total value of the exports amounted, in 1863, to 49,992*l.*; that of the imports to 36,021*l.* It is divided into 5 pars.; Charlestown, the cap., is at its SW. extremity. This colony is placed under a governor and council, and assembly. It has sundry public schools, in which about 650 children are educated. The public revenue, in 1863, amounted to 6,624*l.*, and the expenditure to 6,496*l.* Columbus discovered Nevis, which was settled by the English in 1628.

NEWARK, a parl. and mun. bor., market town, and par. of England, co. Nottingham, on a lateral stream of the Trent, crossed here by a handsome bridge of 7 arches, 16 m. NE. Nottingham, 110 m. N. by W. London by road, and 120 m. by Great Northern railway. Pop. 11,515 in 1861. The approach to Newark from the N. is by a long causeway carried over a flat island formed by the Trent and the Newark branch; and under it are numerous bridges, to give free passage to the waters during the floods. The town, consisting of a principal street on the Nottingham and Lincoln road, crossed by several others, and having a large market-place near its centre, is on the whole well built, paved, lighted with gas, and abundantly supplied with water. Among the public buildings, one of the most interesting, though now in ruins, is the castle near the bridge, called the *New Work*, from the circumstance of its having been re-edified by Stephen. It comprises a square of large dimensions, with 2 massive towers, and seems to have had 5 stories: the interior area is used as a bowling green, but several of the lower rooms are still entire. King John died in this castle, 18th Oct. 1216. The town-hall, in the market-place, a handsome building of stone, erected in 1776, comprises several large apartments for the corporate business. It has also a court-house for the quarter sessions. The church, one of the largest and finest in England, was built in the reign of Henry VI.; it is a cruciform structure, with large aisles, transepts, and chapels, having at its W. end a highly ornamented tower, surmounted by an extremely light steeple, 249 ft. in height, round which are niches containing statues of the twelve apostles. Some of the windows have stained glass, representing the history of Jesus Christ; the choir is separated from the rest of the church by a screen of rich oak carving, and in the interior are several curious monuments. The fabric is kept in repair by the produce of estates belonging to the bor., so that there is no necessity for a church-rate. The living is a vicarage in crown patronage. It has also places of worship for dissenters, with various Sunday schools. The grammar school was founded in 1529; its endowment, at the time of the Char. Comm. Inquiry, amounted to 2,380*l.* a year, and in consequence of a suit in Chancery, the corporation, its trustees, have founded two exhibitions of 80*l.* a year each, tenable for 4 years, at Oxford or Cambridge. The estates held in trust by the bor. for charitable purposes, independently of that above mentioned, are very extensive; and there are several almshouses, a workhouse, and dispensary. A library, a corn-exchange, built 1847–8, and a theatre are the other public establishments.

Newark carries on a considerable trade in malt and corn, and in coal, cattle, and wool. It has also two large brass and iron foundries: bricks and tiles are made here, and large quantities of gypsum and limestone, quarried and prepared in the neighbourhood, are sent by sea to London. The arm of the Trent, on which Newark stands, is made navigable by a lock close to the town.

Newark was divided by the Mun. Reform Act into 3 wards, the corporation comprising a mayor and 5 aldermen, with 18 councillors. It has, also, a commission of the peace under a recorder, with a court of requests for the recovery of debts under 5*l.* The quarter sessions for the SE. div. of the co. are held here. Newark has sent 2 mems. to the H. of C. since the 29th Charles II., the right of election, down to the Reform Act, being in the mayor, aldermen, and inhabs. paying scot and lot. The electoral limits were not changed by the Boundary Act; reg. electors, 738 in 1865. Newark is also the election-town for the SE. div. of the co. Large markets, especially for corn, on Wednesday; fairs, Friday in Mid-Lent, May 14, Aug. 2, Nov. 1, and Monday before Dec. 11.

Newark, which takes its name from the castle, became a place of considerable importance soon after the Norman Conquest; but its principal celebrity is owing to the fact of its having been one of the chief garrisons of the royalists during the civil wars of Charles I. It was besieged by the parliamentary forces in 1643; but both the town and castle were held by the royal army till 11th May, 1646, when it was surrendered to the Scotch by command of the king, who was then a prisoner. The castle was at the same time demolished by order of parliament.

NEWARK, a town or city of the U. States, the

Digitized by Google

largest and most important in New Jersey, though not its cap.; co. Essex, on the Passaic, 3. m from Newark Bay, and 9 m. W. New York. Pop. 71,940 in 1860. The town is well built, and has many good houses. The court-house, gaol, 2 banks, an academy, and the chapels of the Presbyterians, Episcopalians, Baptists, and Methodists are the principal public buildings. It has extensive manufactures of shoes and boots, saddlery, carriages, furniture, hats, and jewellery. The Passaic is navigable to the town for sloops of 80 tons.

NEW BEDFORD, a town and port of entry of the U. States, Massachusetts, co. Bristol, on an arm of Buzzard Bay, 50 m. SSE. Boston. Pop. 22,360 in 1860. The town is regularly laid out upon sloping ground, and has a wealthy and prosperous appearance, chiefly owing to the whale fishery, in which its inhabs. are largely engaged. It has numerous churches, with banks, insurance offices, a court-house, a flourishing lyceum, a gaol, academy, theatre, and several printing-offices, which issue both daily and weekly newspapers.

NEW BRUNSWICK, a tract of country in British N. America, on the W. side of the Gulf of St. Lawrence, between lat. 45° 5′ and 48° 5′ N., and long. 63° 47′ and 67° 53′ W., bounded S. by Nova Scotia and the Bay of Fundy, N. by Lower Canada, and W. by the state of Maine in the U. States. Extreme length, from N. to S., 180 m., average breadth, 150 m.: area, 25,931 sq. m. Pop. 252,047 in 1861, of whom 129,948 males, and 122,099 females. This colony, which is divided into 11 cos., has a much less indented coast-line than Canada or Nova Scotia: the surface, however, is broken and undulating, though not mountainous, and considerable rivers intersect it in all directions, the largest being St. John's, Miramichi, and Ristigouche. The principal gulfs are the Bay of Chaleur and Miramichi, on its E. coast, and that of Passamaquoddy on the S., into which runs the river St. Croix, which divides the province from Maine, in the U. States. Its geology is little known; but limestone seems to be the prevailing feature, though clay-slate, grauwacké, and even the primitive formations occasionally occur. Coal is abundant, and is wrought, near the Grand Lake, by a joint-stock company. Iron and gypsum occur also in considerable quantities. Dense forests cover by far the greater part of the surface, and though the soil is generally rich and fertile, except in a few swampy tracts, only one-sixteenth of the whole province has been surveyed and laid open for settlers. The cutting down and exportation of the fine timber, with which these forests abound, has, however, been extensively pursued for some years, and the quantity of cleared land is progressively increasing. The fauna and flora of the colony nearly resemble those of Nova Scotia, to which, indeed, it formerly belonged. The climate is very similar to that of Canada: winter lasts from Nov. to April, when a sudden change takes place, and vegetation becomes extremely rapid. The temperature in the S. parts is milder and more equable; but the prevalence of sea-fogs, on the shores of the Bay of Fundy, render the cultivation of wheat near the coast very uncertain, though it does not seem to injure the health of the settlers. The climate altogether is uncommonly healthy, and will bear to be compared with that of any part of England. Rheumatism, consumption, and low typhus are the prevalent diseases; but they are in a great measure brought on by exposure to the damp, and the sudden changes of temperature. Agriculture, notwithstanding the rich tracts of alluvial soil skirting the rivers, is considerably less advanced than in Nova Scotia and the Canadas, owing, in part, to its later settlement, but principally to the superior importance attached to its timber trade. Within the last few years, however, great improvements have taken place in these respects; agricultural societies have been formed, new settlers have introduced, in many parts, the more approved systems of husbandry; and emulation has been generally excited by ploughing-matches, cattle shows, and the distribution of premiums. Wheat, Indian corn, barley, and oats are the principal grain crops, but by far the most important article of produce is the potatoe. Red and white clover are the grasses most cultivated, and beans, peas, turnips, mangold wurtzel, and beetroot thrive well, and are raised in pretty considerable quantities. Pasturage is followed to some extent. The felling and conveyance of timber constitutes, however, as before observed, the great employment of the labouring classes; but most of the *lumberers* are dissolute and depraved, and the occupation prevents them from paying proper attention to agriculture. The trees, especially the yellow pines, attain to a great size, and furnish timber of good quality, though inferior to that of Norway and the Baltic. It is principally conveyed to Great Britain in the log, the remainder being manufactured into deals, boards, and staves.

The exports from New Brunswick consist principally of timber, fish and fish-oil, and furs. Their aggregate value amounted to 803,445*l.* in 1862. Ship-building is extensively carried on, chiefly at St. John's, the cap. Though less deeply indented with fishing bays than Nova Scotia, the coast and rivers of New Brunswick abound with fish, especially cod, herrings, salmon, and mackerel; the entire value of the exports of fish and fish-oil amount to a large sum; but the principal attention of the colonists is engrossed by the timber trade. The whale fishery, introduced only within the last few years, has attained considerable importance.

Except timber, and the produce of its fisheries, the exports of New Brunswick are quite inconsiderable. The imports consist of corn (chiefly from the U. States), British and Irish manufactured goods, and various minor articles. The total value of the imports, in 1862, amounted to 1,291,604*l.*

The constitution of New Brunswick places the administration in the hands of a lieutenant-governor, aided by a responsible executive council of 9 members, a legislative council of 22, and a house of assembly of 40 members. The parl. sits at Fredericton, about 90 m. above St. John's. The judiciary courts are the court of chancery, in which the governor presides, the supreme court directed by 4 justices, circuit courts, a court of common pleas, and numerous courts for the recovery of small debts. The revenue is extremely variable, and has been much increased of late years by the sale of unoccupied lands; besides which, a few light taxes are levied for poor rates and other local purposes. After the payment of the local magistracy, the surplus is appropriated to the improvement of the colony, and especially to the formation of roads and bridges. In 1862, the revenue amounted to 139,305*l.*, and the expenditure to 140,600*l.* The expense of the regular army is defrayed by the British government; but there is likewise a native militia comprising upwards of 20,000 men. The church establishment of New Brunswick is similar to that of Nova Scotia, and the diocese of the bishop of that peninsula extends over the province. There are, likewise, Roman Catholics, Presbyterians, Methodists, and Baptists; but the religion of the colonists partakes more of fanaticism than sober rational worship. As respects education, New Brunswick

Digitized by Google

njoys more than ordinary advantages. King's College, at Fredericton, owes its origin to the exertions of Sir Howard Douglas, and has been in active operation for some years. Its maintenance is chiefly provided for by an annual grant of 2,000*l.* from the local government, and the mode of instruction nearly resembles that pursued in Oxford: subscription to articles is not, however, required, except from students of divinity: a grammar-school, also, is supported out of the college-funds. English schools, also, are established in all the pars. of the prov.; and recently provision has been made for the inspection of parish schools, and for the training of teachers.

The pop. of New Brunswick consists of a mixed race of English, Irish, Welsh, and Scotch; but the last are far less numerous than in the neighbouring colonies. The French also have three small settlements on the E. side of the prov. The Indian aborigines have been for many years fast declining in numbers, and all attempts to civilise them or improve their condition have failed: they have a few small villages scattered in different parts, and are all Roman Catholics. In manners and customs the British settlers nearly resemble those of Canada, Nova Scotia, and Cape Breton. The women are handsome; the men generally tall, well-made, muscular, and scarcely ever corpulent. They are remarkably spirited, adventurous, and attached to their country; nor can there be any doubt that they would, if well disciplined, make excellent soldiers.

The country now called New Brunswick was, in the early part of last century, comprised by the French under the appellation of New France, and viewed as an appendage to Acadia. At the peace of 1763 it was ceded, with the rest of Canada, to the English, and, from that time to 1785, was considered as part of Nova Scotia. The country, however, was little more than a mere wilderness, till General Sir Guy Carleton procured for it a royal charter, constituting New Brunswick a distinct prov., with himself as governor. To his exertions it chiefly owes the rapid rise of its prosperity.

NEW BRUNSWICK, a town of the U. States, New Jersey, on the Raritan, 17 m. from Raritan Bay, and 28 m. SW. New York. Pop. 15,153 in 1860. The town is partly built on a low site, but is accounted tolerably healthy. Its principal institutions are Rutger's College, founded in 1770, and a theological seminary established in 1811. New Brunswick stands at the end of the New Jersey railroad, and of the Delaware and Raritan canal, the terminating basin of which is 1¼ m. in length, and 200 ft. wide. The Raritan is navigable for sloops of 80 tons up to the town, which has a brisk trade particularly in grain.

NEWBURGH, a sea-port and market town of Scotland, co. Fife, on the S. bank of the Tay, 13½ m. SW. Dundee, and 9 m. SE. Perth, on the railway from Perth to Edinburgh. Pop. 2,281 in 1861. The town consists chiefly of one street, running E. and W. along the line of the shore, with another at right angles leading down to the harbour. It is mostly of modern date, particularly towards its outskirts, though many old buildings remain to mark its ancient state. The public buildings are the town house, with a spire, the parish church, and a dissenting chapel. The slendid mansion-house of Mugdrum is close to the bor. on the NW.

The harbour is good; but only about a dozen vessels from 60 to 150 tons, exclusive of fishing-boats, belong to the bor. It has notwithstanding a considerable trade, being the port for the greater part of Kinross-shire, Strathearn, and other contiguous districts, both for the export of their agricultural produce, and for importing coals and lime. Most vessels bound for Perth wait here for the flow of the tide, and some of them unload part of their cargo before they can, even at high water, proceed up the river. The weaving of coarse linens is largely carried on, employing from 550 to 600 looms.

Newburgh existed in the 12th century, and was subject to the neighbouring monastery of Lindores, whose remains are yet pretty entire. In 1631 it was created a royal bor. by Charles I.; but, like Falkland, being unable to defray the expenses of its parliamentary representative, it petitioned to be relieved from the burden, which was granted. It has otherwise, however, all the marks of a royal bor., and is governed by 2 bailies and 15 councillors. Municipal revenue, derived from land, about 170*l.* per annum. There are two curious crosses of remote antiquity in the neighbourhood; one called the Mugdrum Cross, the other Macduff's Cross. The former is supposed to commemorate a victory over the Danes in the 10th century; the latter was erected as a sanctuary to any of the kindred of Macduff, thane of Fife, who might commit murder. If they fled thither, and paid a certain fixed solatium to their chief, they obtained protection.

NEWBURGH, a town and port of entry of the U. States, New York, Orange co., on the Hudson, 50 m. N. New York. Pop. 15,200 in 1860. The town is well built, well paved, and well supplied with excellent water. It has places of worship for various sects, an incorporated academy, and several other schools; and paper, plaster, and gunpowder-mills. It is, alternately with Goshen, the seat of the county court, and was the head-quarters of Washington during the publication of the celebrated Newburgh Letters.

NEWBURY, a mun. bor., market town, and par. of England, co. Berks, on the Kennett, crossed here by a stone bridge of 3 arches, 24½ m. S. Oxford, and 53 m. W. by S. London by Great Western railway. Pop. of bor. 6,161 in 1861. The town, a considerable portion of which, on the N. bank of the Kennett, is in the hamlet of Speenhamland, consists of two principal, wide, and well-built streets, arranged in the form of the letter T, with smaller and very irregular streets at its S. extremity. The market-place, opposite the church, is a large open square, in which is the guildhall. The church, erected in the reign of Henry VII., is a large but plain building, with a square tower: the living is a rectory in the patronage of the crown. A district church, in the Gothic style, has been erected on the London road, and is remarkable for its extensive catacombs. There are, likewise, places of worship for dissenters; and the town comprises several Sunday schools and an endowed free-school, besides numerous and wealthy corporation-charities. The almshouses have accommodation for 90 aged people: there is a small bor. gaol, and about ½ m. S. the town is a large Union workhouse.

Newbury, being situated on the main road between London and Bath, had a large posting business, which employed a considerable number of hands, besides occasioning a large importation of horse provender; but this having been superseded by the railway, her importance and pop. have declined. The Kennett and Avon canal, connecting the Severn with the Thames, passes through the town, and affords the advantage of water-carriage from London, Bristol, and S. Wales. In the immediate neighbourhood are silk manufactories, but they are not considerable. The rapid declivity and copious supply of water in the Kennett have occasioned the erection of numerous

Digitized by Google

large corn-mills, two of which are within the town. There are also considerable malt-houses and some extensive breweries. The quantity of grain annually exported from Newbury, either as flour, malt, or in its natural state, amounts to upwards of 7,000 tons, in return for which it imports large quantities of building materials, and various articles of general consumption from the ports of London and Bristol.

Newbury, which is a bor. by prescription, and was afterwards chartered in 38 Eliz., has been governed, since the Reform Act, by a mayor and 3 aldermen, with 12 councillors; it has a commission of the peace under a recorder. The spring quarter sessions for the co., and petty sessions for the hundred, are held here, and it is one of the polling places for the co. elections. Large corn-markets on Thursday: horse and cattle fairs, Holy Thursday, July 5, Sept. 4, and Nov. 8.

Newbury returned 2 mems. to parliament in the reign of Edward I.; and it is not known at what period, or for what cause, it lost the franchise. It was formerly also celebrated for its manufacture of serges and shalloons; and, in the reign of Henry VIII., John Winchcomb, known as Jack of Newbury, kept 100 looms, from the produce of which he became so wealthy as to be able to entertain the king and his retinue during their passage through the town. He was a great benefactor to Newbury; and his house, a large brick structure, is still shown in the High Street, his manufactory being now occupied by a large inn, 'the Jack of Newbury.' The vicinity is remarkable for two battles fought during the civil wars between the royalist and parliamentary forces, Charles I. commanding his army in person on both occasions. The first was fought on a common called the Wash, on 20th Sept. 1643; the second on 27th Oct. in the following year; but neither had any decided result. Donnington Castle, a short distance NW. of Newbury, was the property of Chaucer, and in it he spent the two last years of his life, which terminated in 1400.

NEWBURY PORT, a town and river-port of the U. States, Massachusetts, being the fourth town of the state in pop. and commercial importance, co. Essex, on the Merrimac, about 3 m. from its mouth, and 32 m. N. by E. Boston. Pop. 13,400 in 1860. The port is built on a gentle acclivity, and has an imposing appearance from the river. It consists of two long streets, running N. and S. parallel with the river, and communicating by other streets, crossing them at right angles. Slate Street, the principal, is broad, and lined with good houses, which, though of wood, are well-built and handsome. The streets are partially paved and flagged, but neither lighted nor watched. It is connected with Salisbury, on the opposite side of the river, by a bridge, about ¾ m. long. The harbour is secure, and has usually about 2 fathoms water at low ebb; but it is difficult of entrance, from a bar at the mouth of the river, which is impassable during E. gales.

A breakwater has been constructed within the river, about 2 m. from its mouth, at an expense of 200,000 dollars, for the double purpose of shutting the Merrimac out from a swampy bay S. of the town, and enabling it to clear away the bar; but in these objects it appears to have signally failed. Newbury Port has several cotton, cloth, and yarn factories, numerous distilleries, and manufactures of shoes, hats, cordage, Morocco leather, gold and silver plate. It has a considerable business in ship-building. This town had formerly a large share of the W. India trade: at present it imports a good deal of raw cotton for its own manufactures and those of Lowell; and its inhabs. are actively engaged in the cod and mackerel fisheries and have a brisk coasting trade.

NEWCASTLE-UPON-TYNE, a parl. and mun. bor., and river-port of England, locally situated in Castle-ward, co. Northumberland, of which it is the cap., but it is also a co. by itself, and is celebrated as the principal British port for the shipment of coal, on the N. bank of the Tyne, about 9½ m. from its mouth, 54 m. E. Carlisle, and 244 m. N. by W. London by road, and 275 m. by Great Northern railway. Pop. of bor. 109,108 in 1861. Area of parl. bor., which includes, with the town and co., the five townships of Byker, Heaton, Jesmond, Westgate, and Elswick, 9,130 acres. The town occupies the bottom and sides of an acclivity rising somewhat abruptly from the river; and though a few years back it was very irregularly laid out, and consisted, with but few exceptions, of narrow, circuitous, and ill-built lanes, it has been so improved within the last half a century, that it is now one of the handsomest towns of England.

Grey Street, so called in honour of Earl Grey, the largest of the new streets, is the principal thoroughfare of the town. It ascends a gentle acclivity, and forms a continuation of Dean Street and the Side, which last reaches nearly to the river. Grey Street is nearly ¼ m. in length by 80 ft. in breadth, and is lined with substantial stone houses, which, in point of architectural beauty, may vie with Regent Street, in London: the effect is heightened also by the curvilinear direction of the street. At the top of Grey Street, where it joins Blackett Street, stands the column dedicated to the late Earl Grey, 136 ft. high, and surmounted by a colossal statue of that nobleman, by Bailey. Grainger Street, another fine avenue, 300 yds. in length and 66 ft. wide, is on a similar design with Grey Street; and, at their junction with Market Street, is a large triangular space, on which has been erected the central exchange, a building having three uniform fronts, in the Corinthian style, with circular corners, faced with columns of the same order, and supporting light domes, after those of the temple of Vesta at Tivoli. The outside is formed into handsome shops and ware-rooms, enclosing the exchange, which has four large entrances, and is altogether lighted from above: the roof is ingeniously constructed, resting on the external walls, and inwardly on a circular entablature, supported by fourteen Ionic columns, enclosing a platform, within which is the news-room, the outer space being open, and used for the promenades and rendezvous of the merchants. Adjoining the exchange is a handsome coffee-room, supported by subscribers, and managed by a committee. The Clayton, Nelson, Nun, and Shakspeare Streets are the other principal thoroughfares; and, besides these, Eldon Square, N. of Blackett Street, Westgate, Percy, and Northumberland Streets, deserve notice. The N. suburbs are open; and, being removed from the bustle of town, are occupied by houses suited to the wealthier inhabitants, who have extended their residences into Jesmond township, forming a succession of terraces; and further N. is a group of new buildings, called Brandling Place. On Rye Hill, also, W. of Newcastle, are terraces and villas; and the same is the case on the road to N. Shields. In Sandgate, however, and the lower parts of Newcastle, which extend along the banks of the Tyne for nearly 2 m., there are many narrow, inconvenient, and dirty streets, lined with manufactories and warehouses, and comprising also many lanes and alleys, as filthy, close, and unwholesome as the very worst of those of Liverpool and Manchester. The communication with the bor. of Gateshead, on the S. side of the river, is maintained by means

Digitized by Google

of the 'old bridge,' of nine elliptical arches, and by the railway bridge.

Corporation and Commercial Buildings.—The guildhall, which comprises also the exchange and the court belonging to the incorporated society of hoastmen or coal-fitters (chartered in 1600), is a large building on Sandhill, much enlarged and altered at different periods, but of the most heterogeneous architecture, though at the same time well adapted for business. The rooms contain some valuable portraits of public characters. On the quay, a fine open space paved with stone, and one of the largest in the kingdom, is the custom-house, built after a design by Smirke. The moot-hall, or assize court-house for the county of Northumberland, is within the precincts of the old Norman castle, and consists of a Grecian building, designed from the temple of Theseus at Athens, and faced on two sides by Doric porticoes: the interior is well arranged for the business both of the civil and criminal courts. The new corporation building and corn exchange, a fine edifice, was erected in 1858. The town-gaol, in Carliol Square, is a strong and rather unattractive building, erected in 1827, on the panopticon principle, at a cost of 47,000*l.*; but it is reported that both the site and construction are bad. It comprises about 50 cells, and the same number of rooms. The Trinity-house, in Trinity-chare, Quay-side, is an incorporated institution of great antiquity, intended not only to improve the navigation of the river by the appointment of licensed pilots, but to provide subsistence for poor and decayed brethren, their widows and children. The arcade, in Pilgrim Street, one of Grainger's erections, though perhaps the least distinguished in point of taste, consists of an oblong pile of building, with a Corinthian frontage 94 ft. long and 75 ft. high. The N. of England joint-stock bank and the savings' bank occupy the front rooms; and in other parts are the post, stamp, and excise offices, with auction-rooms, shops, and chambers for lawyers and engineers. It was opened in 1832, and cost 40,000*l.* The barracks, on the NW. side of the town, accommodate nearly 1,000 troops.

Markets.—The corn exchange seems to be sufficiently capacious and convenient, as is the fish market. A large butcher market was built in 1808; but it has been removed; and the only great market now existing in Newcastle is that constructed by Grainger, the largest in England, 318 ft. in length, and comprising an area of 9,050 sq. yards, exceeding that of St. John's in Liverpool by 2,650 sq. yds. It has 14 entrances, and is lined with 243 shops, besides stalls.

Literary and Scientific Institutions.—The Literary and Philosophical Institution (founded in 1793, chiefly through the exertions of the Rev. W. Turner, a celebrated dissenting minister of Newcastle), occupies a building of Doric architecture in Westgate Street; and adjoining the library are the meeting-rooms and museums of the Natural History and Antiquarian Societies of Newcastle. A literary, scientific, and mechanical institution has an establishment in Blackett Street. The Newcastle Institution, for the promotion of the fine arts, in Blackett Street, a handsome building with a Corinthian front, comprises a saloon and octagon gallery well lighted from the top: the establishment is supported by a joint-stock company, and the annual exhibition is in June. The principal places of amusement are the theatre, in Grey Street; the assembly-rooms, in Westgate Street; behind which is the racket court, the riding-school in the public walk called the Forth, and the baths at the N. end of Northumberland Street. The theatre, built in 1835, to replace one that had been pulled down, has a front in Grey Street 120 ft. in length, with a portico of 6 Corinthian columns, supporting a rich pediment; its interior shape is that of a flattened horse-shoe; and in point of size it is surpassed by few English theatres. Races are held in June on the moor, about 1½ m. N. the town; and a good stand has been erected for the accommodation of visitors.

Churches and Chapels.—Newcastle has fourteen churches, the oldest of which is St. Andrew's, a Norman building, at the top of Newgate Street. By far the finest, however, is St. Nicholas, a cruciform structure in the decorated English style, with a choir and nave 220 ft. in length, and 74 ft. in width, the choir only being enclosed for service; a painted E. window, and a magnificent altar-piece of the Last Supper, decorate the interior; and at the W. end is a tower in the early perpendicular style, surmounted by a crocketed steeple resting on four flying buttresses, the whole being 201 ft. in height. This steeple is said by Mr. Rickman, to be 'a piece of composition equally remarkable for its simplicity, delicacy, and excellent masonic arrangement.' (Architecture, 5th ed. p. 218.) St. Giles's, Edinburgh, the College Tower, Aberdeen, and St. Dunstan's in the E. of London, are imitations of this steeple, but they all fall far short of the original. A good library, chiefly of old or theological books, is attached to this church: the rules of admission are liberal; and it is, in fact, open to the public free of charge. All Saints' is a modern Grecian building, with an elegant spire 202 ft. in height; the interior is of an elliptical shape, and richly fitted up with solid mahogany. St. John's, in Westgate, is a cruciform church, built in the 13th century, having a square embattled tower at its W. end. The chapels of ease are, St. Anne's, on the New Road; and another at Barras Bridge, called St. Thomas's, in the early English style, and surmounted by a light tower 140 ft. high. An endowed charity school is attached to each of the churches, and a fifth to the chapel of St. Anne. The dissenters here are numerous, and most respectable: more than two-thirds of the places of worship in the town belong to Methodists and other dissenters, including R. Catholics, members of the Church of Scotland, and the Society of Friends. Few dissenting chapels, however, have any claim to notice from their architectural beauty. Within the bor. are numerous Sunday schools, furnishing religious instruction to upwards of 8,000 children of both sexes. Two public cemeteries have been formed of late years in the suburbs.

Schools and Benevolent Establishments.—The royal grammar school of Newcastle was founded by Thomas Horsley, in 1525. Among its pupils have been the late lords Eldon, Stowell, and Collingwood, the poet Akenside, and several other distinguished characters: Dawes, author of the 'Miscellanea Critica,' was one of its masters. A Lancastrian school, called the 'Jubilee School,' from its being founded in 1809, has a handsome school-house with a large library, and is liberally supported by subscription. A second Jubilee school was founded, to commemorate the 50th year of the prelacy of the late Dr. Shute Barrington: it is on the national plan, and supported chiefly by the clergy and lay members of the Established Church. There are several other endowed and subscription schools, including two infant schools. The principal benevolent institutions are, the infirmary, which has accommodation for 800 in-patients; a dispensary; two blind asylums; a small lying-in hospital; asylum for poor keelmen; Jesus's hospital, for decayed freemen; mendicity society; domestic-guardian institution; and several ranges

Digitized by Google

of almshouses; besides which, there are several minor charities and religious associations. Newcastle has also a large union workhouse.

Coal Trade.—The importance, if not existence, of Newcastle is owing to its convenient situation as a place of shipment for the coal wrought in its neighbourhood. The pits lie on each side the Tyne, from within 2 m. of its mouth to 16 or 18 m. up the river, and upwards of 50 large collieries are opened within a distance of 8 m. around. The coals are conveyed from the pits to the staiths in wooden or cast-iron waggons, brought along railways generally by means of successive inclined planes, or locomotive engines. From such staiths (or coal-shipping wharfs) as are above Newcastle Bridge, the coal is conveyed in keels (each capable of holding 8 chalders or 22 tons) to Wallsend, Jarrow, or Shields, where it is delivered on board the ships, and the strength, as well as activity of the Tyne keelmen, is proverbial in the N. of England. Within the last few years, however, the formation of the Brandling Junction, and other railways, to S. Shields, has caused a diminution of the keel navigation. The coal shipped at Newcastle furnishes a large portion of the supply for the E. and S. cos. of England, including London, and a considerable quantity for exportation, chiefly to France, Holland, and Denmark. The total quantity of coals exported from Newcastle to foreign countries in the year 1863 was 2,058,897 tons, of the declared value of 880,442*l.* On the 1st of January, 1864, there belonged to the port 143 sailing vessels under 50 tons, of a total burthen of 3,902 tons, and 330 sailing vessels above 50 tons, of a total burthen of 101,463 tons. There were, besides, 94 steamers under 50, and 26 above 50 tons, of an aggregate burthen of 9,079 tons. The gross amount of customs duties received was 217,903*l.* in 1863. The Tyne is navigable from its mouth up to Newcastle Bridge, for vessels of 250 tons, though in some intermediate places the depth, even in the middle of the stream, does not exceed 4 ft. at ebb tide. Dredging machines, however, have been in use within the last few years, and the navigation is said to have been much improved, though the bar at the mouth must always prove a great impediment to the entrance of large ships. It is high water at Newcastle about an hour later than at Tynemouth Bar, the average rise of spring-tides being 11 ft. 7 in., and that of neaps 7 ft. 2 in.

The principal manufactures are those of bottles and window glass, mostly carried on in the township of Byker, of mill-work, steam-engines, and of leather and soap. Ship and boat-building, rope and sail-making employ a considerable number of hands; besides which there are several malt-houses, breweries, iron foundries, lead mills, and chemical works.

The Tyne is crossed at Newcastle by two bridges. The first of these, or the 'old bridge,' constructed in 1774–81, on the site of a previous bridge, swept away by a flood, is of stone, and has nine elliptical arches. But, owing to the bed of the river being much sunk, the descent to and ascent from the old bridge make it very inconvenient. Hence a project was long on foot for constructing a 'high level' bridge that should connect the high grounds on both sides the river by a road carried over it at their altitude. And this great improvement has been effected. The railway uniting York with Edinburgh is carried over the Tyne by a high level bridge. But instead of making this bridge single, or serving only to carry across the railway, it has been made double, that is, it has two lines of road, the upper one resting on the top of the arches being the railway, and the other, immediately below, and in part suspended from the latter, being an ordinary road, and serving, as such, for the transit of carriages, horses, and passengers. This singular fabric has four river and two land arches, each 124 ft. 10 in. in span. The carriage road is 35 ft. wide, and the height from the parapet of the railway to the bed of the river, 132 ft. The entire structure cost, including its approaches, 491,153*l.* It was opened by Queen Victoria on the 28th Sept. 1849.

Newcastle was constituted a bor. by William the Conqueror, and has received 36 charters from subsequent monarchs. It is divided by the Mun. Reform Act into 7 wards, and is governed by a mayor and 13 other aldermen and 42 councillors, and has a commission of the peace under a recorder. The assizes and Epiphany quarter-sessions for the co. of Northumberland are held in the moot-hall, besides which there is a mayor's court and sheriff's court for the recovery of debts to an unlimited amount. The town is well paved, lighted, and cleaned by the corporation, and there is an efficient police, established in 1836. Newcastle has sent two mems. to the H. of C. since 27 Edward I., the election being vested, down to the Reform Act, in the free burgesses, both resident and non-resident. The electoral limits were enlarged by the Boundary Act, so as to include, with the old borough, the townships of Jesmond, Heaton, Byker, Elswick, and Westgate. In 1865 the bor. had 7,152 reg. electors. It is one of the polling-places at elections for the co. Markets extremely well supplied, especially with corn, on Tuesday and Saturday: fairs for woollen cloth, hardware, leather, horses, and cattle, Aug. 12 and Oct. 29, each lasting nine days.

The wall of Adrian passes through the town, which is proved, by the numerous antiquities discovered in it, to have been the site of a Roman station; but there is no proof, though a strong presumption, that it was the *Pons Ælii*, mentioned in the 'Notitia.' Before the Conquest it was called Monkchester, from its numerous monastic institutions (of which there are still rather extensive remains), and also from being the resort of pilgrims to the holy well of Jesus' mount (now corrupted into Jesmond). A fortress was built here by Robert, eldest son of William the Conqueror; and it received the name of *Newcastle*, probably, to distinguish it from some more ancient building. In 1299 the walls on the E. side were rebuilt, and in the reign of Edward III. the town was unsuccessfully attacked by David Bruce. Newcastle, at this early period, had become one of the largest commercial ports of the kingdom. It is curious, however, that the first authoritative mention of coal occurs in a charter by Henry III., authorising the burgesses of Newcastle to dig for that mineral. In 1281, the town had a considerable trade in coal, which soon after began to be imported into London, and in 1325 coals were exported to foreign countries. The town furnished, in 1346, 17 ships and 314 mariners for the siege of Calais, a greater force than any port N. of the Thames, except Yarmouth. It continued steadily to increase in commercial importance and mining industry till 1636, when it was visited by the plague, which carried off 5,000 of its inhabs. In the parliamentary wars it warmly espoused the cause of Charles I. With respect to the progress of its coal-trade it may be stated that, in 1703, the masters of the Trinity House of Newcastle reported to the H. of C. that 600 ships, each carrying 80 Newcastle chalders, and navigated by 4,500 men and boys, were required for the supply of other ports; and, in 1772, 450 keels were

Digitized by Google

employed on the Tyne, the quantity shipped amounting to 351,800 Newcastle chalders. The trade has thence been steadily increasing, and with greater rapidity since the introduction of gas.

NEWCASTLE-UNDER-LYNE, or LYME, a parl. and mun. bor., market town, and par. of England, co. Stafford, N. div. hund. Pirehill, 15 m. NNW. Stafford, and 135 m. NW. London, on the London and North Western railway. Pop. of parl. bor. 12,938 in 1861. The town, which is well-paved and lighted, consists of two nearly parallel streets, entered from the London road, and crossed by several others of an inferior description. It is, on the whole, well built, though chiefly consisting of old houses: in the High Street is a large open market-place. The guild-hall, a respectable-looking building, has good accommodation for the municipal and magisterial business. There are two churches, one of which, with the exception of its square tower, was rebuilt at the beginning of last century. A handsome Rom. Cath. chapel was built in 1834; and there are places of worship for Wesleyan and other Methodists, Independents, Baptists, and the Society of Friends. Six Sunday schools are attended by upwards of 1,500 children; besides which a national, Lancastrian, infant, and four subscription schools furnish daily instruction to about 800 boys and girls. Newcastle-under-Lyne has, also, a free grammar-school, founded in 1602, and in trust of the corporation. Almshouses for twenty aged women were established here in 1637, by the Earl of Albemarle, and the town has several benevolent institutions, with Bible, tract, and other associations. A literary and scientific institution was founded in 1836: there is also a public library with 2,000 volumes, and a small theatre, little patronised.

The manufacture of hats is the chief business carried on at Newcastle. The town, a few years ago, was in some measure regarded as the cap. of the pottery district, which includes several towns equal or even superior in pop. and importance to Newcastle itself. Latterly, however, this connection has been broken, and the town has suffered much in consequence. Trade has been very languid till within the last year or two, when it somewhat revived; and at present the labouring classes are in full employment.

Newcastle sustained a serious diminution of its traffic, by the removal of the great line of communication between London and Manchester to the Grand Junction railway, which passes upwards of 6 m. W. of the town. But this has been compensated by the opening of the line from Crew by Stoke, Stone, and Tamworth to Rugby, which passes close by the town. Iron-works and collieries are seated in the neighbourhood, and there are considerable tanneries and malt-houses, with a paper-mill employed in making tissue paper for the potteries. The town is connected by a branch canal with the Grand Trunk navigation, and has access by a similar line of communication to the coal-field of N. Stafford. Markets on Monday and Saturday.

Newcastle-under-Lyne, which received its first charter in the 19 Henry III., was divided by the Municipal Reform Act into 2 wards, and placed under a mayor and 5 aldermen, with 18 councillors; it has also a commission of the peace, under a recorder. The borough has returned 2 mems. to the H. of C. from 27 Edward III., the right of voting down to the Reform Act being in the resident freemen (by gift, birth, and servitude). The Boundary Act added to the old bor. a small extra-parochial part of the Penkhull township: reg. electors, 976 in 1865. It is also one of the polling-places for the N. division of the co. of Stafford. A county court is established in the town, before which 405 plaints were entered in 1848.

The distinguishing name of Newcastle (*under Lyme* or *Lyne*) is of doubtful origin; but the best authorities refer it to the fact of its standing near the woodlands, which formed a *lime* (limit) or separating *line* between the co. palatine of Chester and the rest of England. Ashton-under-Lyne, Whitmore-under-Lyne, and Audlem, or Old Lyme, admit of similar explanations.

NEW ENGLAND, the name commonly given to the NE. portion of the United States, or to the territory including the states of Vermont, New Hampshire, Massachusetts, Maine, Rhode Island and Connecticut.

NEW GALLOWAY. See GALLOWAY, NEW.

NEWFOUNDLAND, a large island of North America, near the Gulf of St. Lawrence, and off the E. coast of Labrador, from which it is separated by the narrow strait of Belleisle, between lat. 46° 30′ and 51° 40′ N., and long. 52° 15′ and 59° 10′ W. Greatest length from N. to S., 350 m.; average breadth, 130 m. Area, 57,000 sq. m. Fixed pop. 122,638 in 1861, exclusive of those who visit the different stations during the fishing season. It may be generally described as of a triangular form, but is broken and indented with broad and deep bays, harbours, coves, rivers, and lagoons, which, besides numerous capes and projecting points of land, form two peninsulas, on one of which, called Avalon, at the SE. corner of the island, is the town and harbour of Avalon. Its surface is wild and rugged, and its aspect from the sea far from prepossessing. The interior is much broken with water; and lakes, marshes, and scrubby trees form its general character. The only large and navigable streams are the Humber, and that called the River of Exploits. Its prevalent geological constitution is of granite, on which are superimposed in some parts porphyry, quartz, gneiss, mica, and clay-slate, with secondary formations: coal and iron also occur in a few places. The E. half of the interior is generally a low, picturesque country, traversed by hills and lakes, the whole being diversified by trees of humble growth. The country westward is more rugged and mountainous, with little wood, except near the shore; but the mountains are not generally in ridges, each apparently having its own particular base. The highest part of the island is the N. peninsula, lying along the strait of Belleisle: near its centre are flats of considerable extent, swampy, unhealthy, and usually covered with peat or strong wiry grass. Spruce, birch, and larch are the principal forest trees. Pine seldom occurs, and never attains a larger size; indeed, there is but little wood of any value, except for fuel and the building of small boats, so that it has scarcely timber enough for its own consumption, much less for exportation. Whortleberry bushes and *wishacapuca* (Indian tea) are the principal plants on the high unwooded grounds. The best soil is along the rivers and at the heads of the bays fringing the island; but both the soil and climate generally are unfavourable to the raising of grain, though well adapted for pasturage and the cultivation of potatoes and other green crops. Vast herds of carriboo deer graze in the plains and woods of the interior, and their flesh constitutes nearly the whole food of the Mic-Mac Indians. Beavers are much scarcer than formerly, but foxes are still numerous along the rivers and sea-coast. Among the other wild animals are wolves and bears, hunted by the Indians from Labrador. Insects are numerous in swampy places, especially in hot weather. The best known and most celebrated of

Digitized by Google

the animals belonging to Newfoundland are its dogs, famed for docility, obedience, and attachment to their masters. They are remarkably voracious, and are usually fed on salted fish; but, like the aborigines of the country, they endure hunger for a very lengthened period. The true breed has become very scarce, and there are only a few specimens of it in England, the animal so called in this country, though equally sagacious, hardy, and fond of the water, being a breed crossed with the mastiff, or some other English dog. The E. and S. coasts, where the winds blow from the sea, are very humid; and during winter the cold is intense. The harbours on the Atlantic shore are not so long frozen over as those within the Gulf of St. Lawrence, where the atmosphere is generally clear, and the climate not unlike that of Lower Canada. During the summer months the days and nights are commonly serene and pleasant; the temperature is very hot during summer, and in winter frequently falls as low as 30° below the freezing point. The island, however, is, on the whole, extremely healthy; and the inhabs. often attain a great age, attended with more than ordinary bodily as well as mental vigour. Agriculture is progressively increasing, but very few give it their exclusive attention, the pop. being principally employed in the fisheries. Almost every family, however, has a small quantity of land in cultivation, though tillage be very imperfectly understood.

Newfoundland has long been celebrated for its fisheries, on which, indeed, the inhab. principally depend. The Great Bank, on the E. side of the island, is in some places about 200 m. in breadth, and 600 m. in length, the soundings being from 25 to 95 fathoms. There is also an outer bank, lying between lat. 44° 10′ and 47° 30′ N., and long. 44° 15′ and 45° 25′ W.; and a continuation of banks extends southward to Nova Scotia. Fogs prevail almost without interruption on these banks, occasioned by the meeting of the waters brought thither by the gulf-stream from the tropics, with the waters carried by the influence of the winds from the polar regions. A counter-current from the N. sweeps, also, along the shore of Labrador, bringing with it large icebergs, and rendering navigation dangerous, especially during foggy weather. The best fishing-grounds on the Great Bank are between the 42nd and 46th parallels; and the principal English settlement, besides St. John's, the cap., are Conception Bay, Carbonier, Grace Harbour, Trinity Harbour, and Placentia, all on the E. side of the island. The islands of St. Pierre and Mequelon, near the mouth of Fortune Bay, on the S. coast, were ceded to France in 1814; the former has a harbour and town of its own name, and is the residence of a gov. The cod-fishery, which commenced a few years after the discovery of the isl., attained so high an importance during the war with France, that the exports of cod and cod-oil were valued, in 1814, at 2,604,000*l.*; but the English fishery has since declined. In 1862, the exports of cod amounted to 1,080,069 quintals, valued at 787,821*l.* Of herrings there were exported, in the same year, 34,484 barrels, valued at 17,242*l.*, and of cod oil 2,637 tons, valued 98,901*l.* The cod-fishery commences early in June; and, as the English have for some years abandoned the bank-shoals to the Americans and French, it is principally carried on close to the shore, in small boats, manned by 2 or 4 persons. Every fisherman is provided with 2 lines, each with 2 hooks, baited with herrings, mackerel, and fish-entrails. In some cases *jiggers*, or artificial fish, are used, provided with 2 strong hooks, which the cod swallows with the bait. *Seines* are also used, by which multitudes of cod are hauled ashore in coves on the coast of Labrador. So abundant are the fish occasionally, that a couple of cod are hooked on each line before it reaches the bottom; and while one line is running out, the fisherman has only to turn round and pull in the other, with a fish on each hook. As soon as the boat is loaded, which, under favourable circumstances, will be in 3 or 4 hours, they proceed to the stage on the shore, where the process of cutting up, salting, and drying takes place; and, after having delivered their cargo, return immediately to sea. The cod-fishery, however, is truly precarious. Sometimes the fish is not equally abundant on all parts of the coast, and the fishermen are compelled to go far from the stations, and, in some cases, to split and salt the cod in the boat. The incessant labour, also, which attends the curing, leaves the shoremen scarcely time during the season to eat their meals, and allows them little more than 4 hours' sleep. The seal-fishery is conducted in vessels varying from 80 to 120 tons, with crews of 20 or 30 men. The season commences early in April: it is principally conducted close to the shore of Labrador, and has become important only within the last 30 years. The cod-fishery on the W. coast has been given up to the French; but there is still a small whale-fishery conducted in boats on the S. side of the island. There is likewise a pretty extensive salmon-fishery.

The trade of Newfoundland consists in the exportation of the products of its fisheries in exchange for manufactured goods, colonial produce, corn, ship-biscuits, and a variety of articles for the consumption of the inhabs. The total value of the imports was 1,007,882*l.* in 1862, and 1,077,272*l.* in 1863; and that of the exports 1,171,723*l.* in 1862, and 1,233,353*l.* in 1863.

The government of Newfoundland was long administered by naval commanders appointed to cruise on the fishing station, who returned to Britain in winter. Within the last century, however, it has been deemed more eligible to have a resident governor. In 1832, in consequence of a petition from the inhabs., a representative government was granted, the election being by almost universal suffrage. The assembly comprises 30 members, and attached to it is a legislative and executive council. The laws are in English, and administered by circuit courts; but the police is neither numerous nor effective. The public income in 1863 amounted to 113,034*l.*, and the expenditure to 115,255*l.* Elementary schools have been established in most districts of the colony, and some of a superior class are especially patronised by government. In 1839, Newfoundland was, with the Bermudas, erected into a bishopric.

The inhabs. are honest and industrious, but addicted to drunkenness, and superstitious to a degree almost beyond belief. Capital offences are exceedingly rare, and petty thefts are scarcely known. The people, consisting chiefly of Irish, Scotch, and the inhabitants of Jersey and Guernsey, or their descendants (the Indian aborigines having been long all but extinct), are employed either wholly or occasionally in the fisheries. The pasture of cattle and sheep, and the cultivation of small spots of land, are likewise partial sources of occupation. The women, besides assisting the men in catching and curing the fish, are engaged either in rural occupations, or spinning and knitting worsted stockings, mittens, and socks. In winter much time is occupied in bringing home fuel, building boats, and making or repairing the fishing implements. Marriages and christenings are commonly celebrated at the close of the fishing season, or in winter, and are always times of great festivity and

Digitized by Google

merriment. St. Patrick's and Sheelagh's days are celebrated with riotous mirth by the Irish; and Christmas is a universal holiday, marked by the observance of many customs that are now exploded in England. Celibacy is rare, and families of 10 or 12 children are very common. The fishermen's houses are one story high, built of wood, and covered with boards and shingles, imported from Nova Scotia and New Brunswick. Their usual diet consists of ship-biscuits, potatoes and fish, salt pork and bohea tea, spruce beer being the common beverage for those living, as most of the people do, on fish and salt meat. Spirits are mixed with the beer, to make the mixture called *Callibogus*, and rum is so cheap, that the labouring classes are apt to acquire habits of intoxication, which, however, is somewhat obviated by the practice of *kegging*, somewhat similar to taking the temperance pledge, either for one or more years, and occasionally for life.

Newfoundland was probably first discovered by the Norwegians, at the beginning of the 11th century, but, if so, it was subsequently forgotten, till John Cabot visited it in the summer of 1497, and gave it its present name. As early as the year 1500 an extensive fishery was carried on, by the Portuguese and French, on the neighbouring banks; but, though Sir Walter Raleigh, and others, attempted to form a colony here, no successful settlement was made, till Sir G. Calvert, afterward Lord Baltimore, in 1623, established himself on the SE. part of the island, called Avalon, and appointed his son governor. Ten years afterwards a colony was sent over from Ireland, and in 1654 a few English settlers came over, under the authority of a parliamentary grant. The French who, very early in the 17th century, had formed a station at Placentia, were for many years a constant source of annoyance to the English; and though, by the peace of Utrecht, the possession of the island was confirmed to the English, the subject of fishery rights is still a *vexata questio* between the two nations. With respect to the fishery generally, it was chiefly carried on, during the first half of the last century, by the English, Anglo-Americans, and French; but the capture of C. Breton, and other possessions in America, gave a severe blow to the fishery of the latter. The American war divided the British fishery, that portion of it that had previously been carried on from New England being thereafter merged in that of the United States.

NEW HAMPSHIRE. See HAMPSHIRE, NEW.

NEWHAVEN, a city and sea-port of the U. States, in Connecticut, of which, conjointly with Hartford, it is the cap., co. Newhaven, on an inlet of Long Island Sound, 35 m. SSW. Hartford, and 75 m. NE. New York. Pop. 39,270 in 1860. The town is built on a plain, about 2 m. from N. to S., and 3 m. from E. to W. The streets and squares are quite regular, and all shaded with fine trees. In the centre of the city is the public square, in which are the state-house, several of the churches, and Yale College. The new state-house is built after the mode of the Parthenon. Yale College is one of the most distinguished literary institutions in America. It was incorporated in 1701, and removed thither in 1717. The college buildings, which are of stone, comprise 4 halls, each 100 ft. by 40 ft., in which are the dormitories of the students; a chapel, 2 halls for lecture rooms, a large dining-hall and the medical college. This institution has the finest cabinet in the U. States, a good anatomical museum, and libraries, comprising altogether 48,000 vols. The state hospital, the churches of the Episcopalians, Baptists, Methodists, and Africans; the gaol, custom-house, almshouse, and museum are among the chief public edifices. The legislature of Connecticut meets alternately at Hartford and Newhaven. This city has a considerable foreign and coasting trade. Its harbour, though shallow, and gradually filling up with mud, is spacious and secure; and the wharfs bordering it are extensive, one being nearly 4,000 ft. in length. Newhaven is connected with Hartford by a railroad; and with Northampton, and other parts of Massachusetts, by a canal. It communicates daily with New York by steam-boats.

NEW JERSEY. See JERSEY, NEW.

NEWMARKET, a market town of England, partly in hund. Chevely, co. Cambridge, and partly in hund. Lackford, co. Suffolk, 13 m. ENE. Cambridge, and 55 m. N. by E. London on the Great Northern railway. Pop. 4,069 in 1861. The town comprises one long and wide street, lined with respectable shops, handsome private residences, numerous hotels and inns for the accommodation of the nobility and others who flock thither during the races. It has some handsome public buildings, among which may be specified the news-rooms belonging to the Jockey Club. The stables are most extensive, and are fitted up with every convenience. Of the two parish churches that of St. Mary's is by far the most handsome, and has a tower and steeple that form a prominent feature when seen from a distance. The Wesleyan Methodists and Baptists have also their places of worship, with attached Sunday schools. There are numerous small charities.

Newmarket derives its chief fame from its races. Horse-racing, though now so favourite a diversion, is of rather late origin in England, and does not appear to have been much practised till the latter part of the reign of Queen Elizabeth. In the following reign, however, James I. was a distinguished patron of the turf, and imported Arabian horses for the improvement of the native breeds. In the early part of the reign of Charles I., Newmarket became celebrated for its races; and Charles II., who was still more zealously attached to this new resort of the sporting world, regularly attended these races, and repaired and enlarged the house in the town that had been occasionally occupied by his father and grandfather. From this epoch Newmarket has been the racing metropolis of the empire, and has always had to boast of the most distinguished patronage, 'Newmarket fame and judgment in a bet' being an object of the highest ambition with many nobles and wealthy commoners of our own day, as well as with those of the days of Pope. The race-course on the heath, to the W. of the town, is probably the finest in England. It is apportioned into different distances, corresponding with the ages and supposed powers of the horses, the longest course being 4m. 1 furlong and 128 yds., and the shortest 2 furlongs and 47 yds. The grand stand has every accommodation for spectators. There are 7 race meetings during the year, instituted at different periods, each lasting three days: the earliest is the Craven meeting, on Easter Monday; then follow the two spring meetings; a fourth takes place in July; and there are three others in October, the last being called 'the Houghton meeting.' The sovereign gives three plates annually; one is provided from a fund left for the purpose, and others are given by the nobility or subscribed for by the members of the turf. The training-ground, on a slope S. of the town, is considered superior even to the course for trying the mettle, wind, and speed of the horses. About two-thirds of the adult male pop. are trainers, stable keepers, and grooms; and, in fact, the town is wholly dependent for support on the races and the training of horses. Markets on Tuesday: fairs, Whit-Tuesday and Nov. 8, chiefly

Digitized by Google

for horses and sheep. Newmarket was nearly burnt down in 1683, and again at the commencement of last century.

NEW ORLEANS, a city and river port of the U. States, Louisiana, of which it is the cap., and the commercial metropolis of the southern and western portions of the Union, on the Mississippi, about 105 m. from its mouth. Pop. 168,675 in 1860, against 116,375 in 1850, and 102,191 in 1840. The city is built on a wide level, along the river's edge, the ground being so spongy that none of the houses have cellars. The surface of the river at high water is also from 2 to 4 ft. above the level of the town; and even in its lower stages it is above the level of the swamps in the rear of the city. To obviate inundations a *levée*, or embankment, from 5 to 30 ft. in height, has been raised for about 100 m. along the river. A breach sometimes occurs in this dyke, but it is rarely permitted to do much damage before it is closed; and the most serious drawback the city suffers from its situation is its insalubrity. It is usually visited by the yellow fever from July to September, every year or every two years, when great numbers of the poor are swept off, and the rich betake themselves to some more healthy situation. But the fury of this scourge has latterly been mitigated by draining some of the contiguous swamps, paving certain parts of the city, and substituting stone for wooden sewers.

New Orleans, having few steeples or other conspicuous objects, makes no striking appearance from a distance. The city is built in the form of a parallelogram, composed of six complete squares, with suburbs or *fauxbourgs*, which are rapidly increasing. The streets in the old city are hardly 40 ft. wide; but in the newer portions they are much wider, and intersect each other at right angles. The cathedral, at the head of a square, is an old building, with 4 towers and massive walls, ornamented with figures of saints in the niches. It is the only public building at all imposing. Public institutions, though numerous, are built in an unpretending style. There are very few churches in proportion to the pop. The French theatre is in the city, and the American in the suburbs. The houses (which in the old city are lofty, ornamented with tasteful cornices and iron balconies, and presenting many characteristics similar to those in the towns of France and Spain) are chiefly of brick, and many of them stuccoed externally of a white or yellow colour. In the new portion of the city the houses are built in the modern American style. Many of the doors are left open during the day, and mosquito curtains substituted in their stead. Next to the Roman Catholic cathedral the state-house, custom-house, exchange, U. S. mint, barracks, college, the charity hospital, which provides for from 8,000 to 9,000 in-door and out patients annually, 3 other hospitals, the orphan-asylum, and several theatres are the principal public buildings. The charitable institutions are both numerous and well conducted. There are places of worship for Episcopalians, Unitarians, Baptists, Methodists, and other sects; but most of the white pop., being of French or Spanish descent, are R. Catholics. Half the fixed residents are black or coloured; but in no city is there a greater mixture of races. Inhabs. from every state in the Union, and from every country in Europe, with creoles and all the shades of the coloured pop., unite to form a curious contrast of manners, languages, and complexions. The markets of New Orleans are well supplied, and provisions are cheap, while labour of all kinds is dear. The city is abundantly furnished by the Mississippi with water, which, though turbid at first, becomes clear and palatable on being filtered or allowed to settle. Morals are said to be at a lower ebb in this than in any other great city of the Union. Education and a taste for literature are little diffused, and there are comparatively few newspapers and reading rooms. On the other hand, however, there are an immense number of lottery-offices, billiard-rooms, and gambling-houses. The police is good.

Commerce.—New Orleans is the grand emporium of all the vast tracts traversed by the Mississippi, the Missouri, and their tributary streams, and enjoys in consequence a greater command of internal navigation than any other city either of the Old or New World. Civilisation has hitherto struck its roots, and begun to flourish only in some comparatively small portions of the immense territories of which New Orleans is the sea-port; and yet her progress, up to the breaking-out of the American civil war, has been rapid beyond all precedent. This war, however, proved most disastrous to the interests of the city, by momentarily annihilating the cotton trade, and checking the commerce and industry of the Southern States of the Union. In 1860, the year before the actual breaking-out of the war, there cleared at the port of New Orleans 1,293 vessels—958 American, and 335 foreign—of a total burthen of 894,353 tons. In the next year, 1861, there only cleared 130 vessels—104 American, and 26 foreign—of a total burthen of 76,935 tons. It must take years to restore to New Orleans even a portion of her former prosperity.

Vessels of the largest burthen may navigate the river several hundreds of miles above New Orleans. Notwithstanding a large proportion of her foreign trade is carried on in foreign bottoms, she still ranks as the third shipping port in the Union, being, in this respect, inferior only to New York and Boston. The depth of water in the river opposite to New Orleans is, at a medium, about 70 ft.; and it maintains soundings of 30 ft. till within a mile of its confluence with the sea. Besides 3 or 4 of inferior consequence, the Mississippi has 4 principal passes, or outlets. But in the SE., or main pass, at Balize, the water on the bar at ordinary tides does not exceed 12 ft.; and as the rise of the tides in the Gulf of Mexico is not more than 2 or 2½ ft., vessels drawing much water cannot make their way from the ocean to New Orleans.

The commerce of the city is facilitated by means of canals, which connect it with Lake Pontchartrain, and by the Carrolton, Pontchartrain, and Orleans Street, and other railways.

New Orleans was founded by the French in 1717; in 1769 it was occupied by the Spaniards, in whose hands it continued for about 34 years. In 1814–15 a British army, which had effected a landing in the neighbourhood, was compelled to re-embark, after having sustained great loss in an attack on the entrenchments of the Americans under General Jackson. New Orleans joined the insurrectionary movement of the 'Confederate States,' on the 25th January, 1861, on which day the Louisiana Convention passed an 'ordinance of secession.' The city remained with the Confederate States for about a year, till the 25th of April, 1862, when Flag-officer Farragut, having destroyed the fleet of the insurgents in the Lower Mississippi, and having run by Forts Jackson and St. Philip, appeared before the city of New Orleans with a portion of the fleet of the United States. After negotiations continued over the two following days, the city was surrendered to him on the 28th of April. The loss of this important city was the first great blow to the success of the Confederate States.

Digitized by Google

NEWPORT, a parl. bar., market town, and par. of England, in the centre of the Isle of Wight, of which it is the cap., on the Medina, 14 m. SSE. Southampton, and 75 m. SW. London. Pop. of parl. bor., which comprises, with the old bor., a portion of the par. of Carisbrooke, 7,934 in 1861. The town has one principal street, with two or three others meeting it at right angles, and forming spacious market-places. The best streets are well built, paved, and lighted with gas; but there are several inferior houses on the N. side of the town and along the river. The market-house is an old building, open in the lower part, the upper story being formed into apartments for the corporation business. The church is a large edifice, having three aisles, divided from each other by pointed arches, and an embattled tower at its W. end: the living is a vicarage, subordinate to Carisbrooke. The Rom. Caths., Wesleyan Methodists, Baptists, Unitarians, and the Society of Friends have places of worship; and there are 5 Sunday schools. A grammar-school was founded, in 1619, by James I. In its school-room, a venerable looking structure of grey stone, Charles I. and the parliamentary commissioners carried on the negotiations which ended so fatally for the former. There is also a girls' charity school. The literary institution, assembly-rooms, and theatre are the other principal public establishments. Within the bor. is a gaol, built at the joint expense of the bor. and the island generally: it has rooms for the separate confinement of male and female tried and untried prisoners; but there is little further classification. The old castle of Carisbrooke occupies an eminence, about 1¼ m. SW. the town. About 1 m. N. is a workhouse for the poor of the entire island, and near it is Parkhurst military depôt and hospital, erected in 1780, and furnishing accommodation for upwards of 3,000 troops.

The bor. of Newport is supposed to have been incorporated in the reign of Henry II., but its principal charter was granted by James I. Under the Municipal Reform Act it is divided into 2 wards, and is governed by a mayor, 5 aldermen, and 18 councillors: it enjoys also a commission of the peace, under a recorder. Corporation revenue 1,837*l.* in 1862. An ancient court, the *Curia militum*, consisting of freeholders, is held once in three weeks at the town-hall, and exercises jurisdiction over all the island, except the bor. Newport has sent 2 mems. to the H. of C. since the 23rd Edward I. A portion of the par. of Carisbrooke was added to the old bor. by the Boundary Act: registered electors 662 in 1865. Newport is also the election-town for the Isle of Wight, which, under the Reform Act, sends 1 member to the H. of C.

NEWPORT (Welsh, *Castell-newydd*), a parl. bor., market town, and river-port of England, hund. Wentloog, co. Monmouth, on the W. bank of the Usk, crossed here by a stone bridge of 5 arches, and about 4 m. from its mouth, 20 m. SSW. Monmouth, 124 m. W. by N. London by road, and 158 m. by Great Western railway. Pop. of bor. 23,249 in 1861. The town comprises a narrow and crooked main street, bifurcating at its S. extremity, and crossed by others still more irregular. On an eminence S. from the town is the old par. church of St. Woollos, with a square tower, apparently of Norman architecture, though much altered at different periods: the living is a vicarage, in the gift of the bishop of Gloucester. There are places of worship for Wesleyan Methodists, Calvinists, Baptists, R. Catholics, and other dissenters. National and Lancastrian schools are established here, and the Sunday schools are attended by about 900 children. Near the bridge are some interesting remains of a baronial castle, said to have been erected by Robert Fitzroy, son of Henry I.; and not far off are the ruins of an old monastery.

Newport is extensively engaged in the iron and tin trade, and in the export of coals. It is connected with Pontypool and Crumlin by the Monmouthshire Canal. Iron and coal are brought from the former, coals only from the latter. Tramroads also connect Newport with the Romney, Tredegar, Sirhowey, Ebbervale, and Beaufort ironworks. It may, indeed, be considered a very thriving place: new docks and wharfs are building, or in contemplation, and the town is rapidly increasing. On the 1st of January, 1864, there belonged to Newport 12 sailing vessels under 50, and 89 over 50 tons, besides 3 steamers of an aggregate burthen of 317 tons. The gross amount of customs' duties received, in 1863, was 13,691*l.* The river is navigable for sea-going ships close up to the town, and ship-building is carried on to a considerable extent. The iron-foundries are on a large scale, and there are nail factories, roperies, breweries, and a pretty extensive pottery.

Newport, which received its earliest charter in the reign of Edward III., was divided by the Municipal Reform Act into 2 wards; its mun. officers being a mayor and 5 aldermen, with 18 councillors. It has also a commission of the peace, under a recorder. In conjunction with Monmouth and Usk, Newport has sent 1 mem. to the H. of C. since the 27th Henry VIII., the right of election down to the Reform Act being vested in the resident burgesses. The electoral limits were enlarged by the Boundary Act, so as to include with the old bor., additional portions of the pars. of St. Woollos and Christchurch. Reg. electors for the united bors., 1,812 in 1865. It is also one of the polling-places at elections for the co., and the principal town of a poor-law union, comprising 30 pars. and townships. Markets on Saturday; cattle markets the 3rd Monday in each month; fairs, Holy Thursday, Whit-Thursday, 15th Aug., and 6th Nov.

NEWPORT, a market town and par. of England, S. Bradford, hund. co. Salop, near its E. limit, 16½ m. WNW. Shrewsbury, 128 NW. London by road, and 144 m. by London and North Western railway. Pop. of town 2,856, and of par. 3,051 in 1861. Area of par. 800 acres. The town consists principally of a main street, on the road between Shrewsbury and Stafford, in the centre of which stands the par. church: the living is a perpetual curacy, in the gift of the lord chancellor. A grammar-school, founded in 1565, is endowed with lands producing about 1,000*l.* a year, and funded property to the amount of 12,450*l.*: it has 8 exhibitions at Oxford and Cambridge, and is conducted by 2 masters. An English school is supported out of the funds of the same charity, and there are 2 sets of almshouses. The town comprises also an old but well-built market-hall. The chief business of Newport is its retail trade for the supply of the neighbourhood. Malting is carried on extensively, and it derives some advantages from its situation on a branch canal connecting the Shrewsbury canal with the Liverpool and Birmingham Junction canal. Markets on Saturday: cattle and sheep fairs, first Tuesday in February, Saturday before Palm Saturday, May 28, July 27, Sept. 25, and Dec. 10.

NEWPORT, a decayed bor. and market town of England, co. Cornwall, N. div. hund. East, separated from Launceston, of which it is a suburb, by a small rivulet. Though it had for many years been quite insignificant, this bor. sent, from the reign of Edward VI., 2 mems. to the H. of C. (nominees of the duke of Northum-

Digitized by Google

berland) down to the passing of the Reform Act, by which it was disfranchised.

NEWPORT, a sea-port town of the U. States, Rhode Island, on the W. shore of the island, whence the state derives its name, 26 m. S. by E. Providence. Pop. 10,500 in 1860. Previously to the American revolution, this town ranked third or fourth among those of the British N. American colonies; but it has since been far outstripped by others, though it has still a considerable commerce. Its advantages for sea-bathing make it a favourite place of summer resort. It is regularly laid out, and its houses have an antique appearance. The state-house, gaol, several banks and insurance offices, and a good library, are the principal public establishments. The harbour, defended by 3 forts, is spacious, deep, and of easy entrance.

NEWPORT PAGNEL, a market town and par. of England, at the N. extremity co. Buckingham, hund. of its own name, near the junction of the Ouse and Ousel; 13 m. ENE. Buckingham, and 48¾ m. NW. London, on the London and North Western railway. Pop. of town 3,676, and of par. 3,823 in 1861. Area of par. 3,220 acres. The town is straggling and ill-built. The church, which has lately been thoroughly repaired, is a large building of considerable antiquity, occupying an eminence which commands an extensive view of the surrounding rich country: the living is a vicarage, valued at 230*l.* a year, and in crown patronage. The Rom. Catholics, Wesleyan Methodists, and Independents have also places of worship, with attached Sunday schools. National, Lancastrian, and infant schools are supported by subscription, and there are 2 endowed charity schools for girls. A mechanics' institute has been established here, and there is a theological academy for training independent ministers. Revis's almshouses provide lodging, clothes, fuel, and a stipend of 10*l.* a year to 7 aged persons, and Queen Anne's Hospital (founded by Anne, consort of James I.) is appropriated to the maintenance of 6 poor men and women, an allowance, also, of 10*l.* a year being made to the vicar as its master. There are several other minor charities and bequests belonging to the par., and in trust of the vicar and churchwardens.

Newport Pagnell had formerly a very extensive manufacture of bone-lace, which, though greatly injured by the competition of the machine-lace of Nottingham, still forms the staple trade of the town. The petty sessions for the hund. are held here. Markets well supplied with corn on Saturday: cattle and lace fairs, April 22, June 22, and Oct. 22.

NEW ROSS, a parl. bor. and river-port of Ireland, co. Wexford, prov. Leinster, on the declivity of a steep hill, on the E. side the Barrow, 13 m. NE. Waterford. Pop. 6,488 in 1861. The town is in general pretty well built. It has a parish church, a chapel of ease, 2 Rom. Cath. chapels, a friary, and a nunnery, with meeting houses for Presbyterians, Independents, Quakers, and Methodists; several endowed schools, an infirmary, a fever hospital, and dispensary, a lying-in hospital, the Trinity hospital, and other almshouses, with several minor charitable institutions; a market-house and corn-market; a barrack, the barrack court-house, sessions-house, and bridewell. A bridge, 510 ft. in length, with a drawbridge for the passage of vessels, leads across the river to the suburb of Rossbercon, in the co. Kilkenny. The corporation, which received its first charter in the reign of Edward I., consisted of a sovereign, burgesses, and commonalty. It returned 2 mems. to the Irish H. of C. till the Union, since which it has sent 1 mem. to the Imperial H. of C. The electoral limits, as fixed by the Boundary Act, comprise an area of 544 acres. Registered electors, 195 in 1865. The workhouse for New Ross Union, opened in 1842, has accommodation for 1,900 inmates. General sessions are held at Easter and Michaelmas; petty sessions every fortnight. The town is a constabulary station, and it has breweries and distilleries. Markets on Wednesdays and Saturdays; fairs, 10th Jan., 10th Feb., 17th March, Easter Monday, 3rd May, Whit Monday, 10th June, 10th July, 10th August, 10th Sept., 18th Oct., 10th Nov., and 8th Dec.

New Ross is well situated for trade: vessels of 200 tons reach it at all times of the tide, and those of 600 tons at high springs: the river is also navigable for barges to Athy, where it unites with the Grand Canal, communicating with Dublin on the one hand, and the Shannon on the other. The port, which was formerly subordinate to Waterford, has been made independent. It imports fish from Newfoundland, and timber from N. America and the Baltic. Gross amount of customs revenue 20,549 in 1863.

Though called New, Ross is really an old town. A sanguinary conflict took place here on the 4th of June, 1798, between the insurgent Irishmen and the military. The former repeatedly forced their way into the town, but were in the end repulsed with great loss.

NEWRY, a parl. bor., river-port, and town of Ireland, prov. Ulster, on the Newry Water, about 16 m. above where it falls into Carlingford Bay, and on the railway from Belfast to Dublin; 34 m. SW. Belfast, and 56 m. N. Dublin. Area of parl. bor. 2,543 acres. Pop. 11,426 in 1861. The town is divided by the river into two unequal portions, the largest of which, on its W. side, is in the co. Down, and the other in Armagh; the communication between them being kept up by 4 bridges, 2 of which are handsome structures.

Its more ancient part, on the declivity of a hill, has narrow and ill-arranged streets; but the modern portion, on the low ground along the river and canal, has wide airy streets, with good houses, mostly of granite. The principal public buildings are, 2 Protestant episcopal churches; St. Patrick's, originally built in 1578, and rebuilt after the Revolution, and St. Mary's, a handsome structure, erected in 1812, with a spire 190 ft. in height. It has also 2 Rom. Cath. chapels, one of which, of large dimensions, in the Gothic style of architecture, is regarded as the cathedral of the see of Dromore. A convent of the order of St. Clare has also a chapel attached to it. The Presbyterians have four places of worship, the Methodists 3, and the Independents and Kellyites 1 each. The institutions for education comprise a preparatory seminary for Maynooth College, a school attached to the convent of St. Clare, and 3 schools connected with the board of national education, in which, and in other minor schools, about 1,700 pupils are instructed. Some of the apartments of a suite of assembly-rooms, erected in 1794, are now used as public offices and for a savings' banks. It has also a mendicity association and some almshouses; a hospital, with accommodation for 40 patients; a good custom-house; and barracks for 700 men.

The environs, which are very beautiful, are studded with numerous seats, surrounded by well-wooded demesnes. The town is paved, cleaned, lighted with gas, and watched, under the management of a board of commissioners. The supply of water is wholly derived from numerous private springs. The workhouse for the Newry Union,

Digitized by Google

opened in 1841, has accommodation for 1,000 inmates.

The *Lordship of Newry*, of which the town forms part, extends over 17,054 acres. It formerly was attached to a monastery, and enjoyed very extensive privileges, which, after the dissolution of religious houses in the reign of Henry VIII., were vested in the Bagnal family, of which the Earl of Kilmorey is the present representative, his lordship being lay rector and impropriator of the tithes. The bor. was incorporated by James I. in 1613; but the corporation under this charter having, from some cause or other, been extinguished, the seneschal, appointed by Lord Kilmorey, became the ruling officer in the town, holding a manor-court every third Wednesday for sums not exceeding 10*l.*, and a weekly court of record on Mondays for pleas to the amount of 3*l.* 6*s.* 8*d.* Irish. The general sessions for the county of Down are held here twice a year, as are those for the W. division of Armagh, in which the town is partly situated. Here is a bridewell, in which prisoners are confined until transmitted to the county prisons at Downpatrick or Armagh. The bor. returned 2 mems. to the Irish H. of C.; and, since the Union, it has returned 1 mem. to the Imperial H. of C. The charter restricted the right of voting to the provost and 12 burgesses; but, on its extinction, the franchise came to be enjoyed by the inhab. at large. It was, however, confined by the act 35 Geo. III. cap. 29 to the occupiers of houses rated at the annual value of 5*l.* The Boundary Act did not change the limits of the bor. Registered electors, 513 in 1865.

Though not distinguished by its manufactures, it has several foundries, a flint glass factory, a distillery, breweries, several flour-mills, and tanworks; and in its vicinity are large flax-mills and a cotton-mill. The opening of the Newry Canal connecting Carlingford Bay with Lough Neagh, has been of great advantage to the town, having made it the entrepôt of a very considerable district, and the seat of an extensive commerce. It is the principal port in the kingdom for the shipment of butter; and it has been farther improved by the Belfast and other railways. Vessels of small burden come up to its quays, but those of larger burden load and unload at Warren's Point, about 4 m. lower down. On the 1st of January, 1864, there belonged to the port 76 sailing vessels under 50, and 42 above 50 tons, besides 4 steamers of an aggregate burden of 271 tons. The gross amount of customs revenue, in the year 1863, was 22,476*l.*

Exclusive of its cross-channel trade with Great Britain, especially that with Liverpool and Glasgow, which is by far the most extensive, Newry has some trade with North America, the ports on the Baltic, and other foreign countries. A general market, and a market for linens, which are extensively produced in the neighbourhood, are held every Thursday; and a market for grain on Tuesdays, and for meat on Saturdays.

Newry was early of considerable importance, and had a castle. It suffered in the war of 1641, and was nearly destroyed by the Duke of Berwick in 1689. It is now one of the most thriving towns in the N. of Ireland.

NEWSTEAD, a village of England, co. Nottingham, being a liberty of the par. of Paplewick, in the N. div. wap. Broxtow, 8 m. N. by W. Nottingham. Pop. 108 in 1861. This village is celebrated for its proximity to Newstead Abbey; a structure, the fame of which will endure as long as the English language. The abbey was formerly a priory of Black Canons, founded by Henry II., and granted at the dissolution to Sir John Byron, the ancestor of the illustrious poet, to whom it is wholly indebted for its celebrity. The part now inhabited consists principally of the rooms and offices of the priory, the church, except the S. aisle, having fallen entirely into decay. The front has a noble and majestic appearance, being built in the form of the W. end of a cathedral, adorned with rich carving and lofty pinnacles. The cloisters exactly resemble those of Westminster Abbey, only on a smaller scale, but possessing, if possible, a more venerable appearance. The cloister-court has a basin in the centre; and many of the ancient occupants of this noble pile lie under its flagged pavement. The chapel is still entire. The abbey stands

> '—— embosom'd in a happy valley,
> Crown'd by high woodlands.' . . .

And the ivy-covered ruins of the Gothic church, with its 'mighty window' and tower, strikingly contrast with the castellated mansion and its offices.

> 'Before the mansion lies a lucid lake,
> Broad as transparent, deep, and freshly fed
> By a river,' . . . . .

with woods sloping down to its banks. The apartments are spacious and superbly furnished in the old style; and the venerable fabric, with its remnants of monastic and baronial magnificence, its sombre appearance and sequestered situation, seems to have harmonised well with the moody mind of the 'noble Childe.' An antique cross of red sandstone stands in the courtyard, and a Gothic greenhouse leads into a beautiful garden, formerly the cemetery of the priory, where is a pedestal of white marble erected by the poet over a Newfoundland dog that had saved his life. The remains of Lord Byron are interred in Hucknall churchyard, a few miles from the abbey, which has passed from the family.

NEWTON-IN-THE-WILLOWS, otherwise called *Newton-in-Makerfield*, a bor., market town, and township of England, W. Derby, hund. co. Lancaster, 15 m. W. by S. Manchester, and 168 m. NW. London. Area of township, 3,070 acres. Pop. 5,909 in 1861. The town comprises one main and rather long street, conveniently situated near the point where the Manchester and Liverpool railway unites with the Grand Junction and Union railways: it has also a large depôt and station. There are several churches and chapels, and two or three Sunday schools. A free school, founded in 1699, is endowed with 5*l.* a year. Horse-races take place annually on the common N. of the town. Its market, long disused, was re-established in 1858, and is held on Saturday. Fairs, May 17 and 18, Aug. 11 and 12. Newton returned 2 mems. to the H. of C., nominees of the lord of the manor, from 1st Eliz. down to the Reform Act, by which it was disfranchised.

NEWTON-LIMAVADY, an inland town of Ireland, co. Londonderry, prov. Ulster, near the Roe, about 1½ m. E. from Lough Foyle, and 15 m. NE. Londonderry. Pop. 2,734 in 1861. The town is agreeably situated on the E. bank of the river Roe, in a fertile and well cultivated district. The public buildings comprise the par. church, 3 Presbyterian meeting-houses, and 1 Methodist do.: a dispensary, sessions-house, a market-house, and a bridewell.

The corporation, under a charter of James I., in 1613, consisted of a provost, 12 burgesses, and a commonalty, and returned 2 mems. to the Irish H. of C. till the Union, when it was disfranchised. General sessions are held in June and December; petty sessions on alternate Tuesdays. The town is a constabulary station.

Digitized by Google

Markets for corn are held on Tuesdays and Fridays, and for general sales on Mondays. Fairs on the second Monday in February, 28th March, 13th June, 12th July, and 29th October.

NEWTON-STEWART, a market town of Scotland, co. Wigtown, in the vale of the Cree, mostly on level ground, on the banks of that river, and on the high road from Dumfries to Portpatrick, 36 m. W. the former, and 25 m. E. by N. the latter. Pop. of town, 2,535 in 1861. It chiefly consists of one main street along the road. A suburb, called Cree Bridge, on the opposite side of the river, and in the stewartry of Kirkcudbright, is connected with the town by a handsome granite bridge. A few hand-loom weavers are employed by the Glasgow manufacturers, and it has a brewery and tan-work. But the inhab. are chiefly dependent for support on its retail trade with the surrounding country and its markets. Large quantities of pork are cured here, chiefly for the English market. Vessels of 70 or 80 towns come up the Cree (which falls into Wigtown Bay) to Carty, within 1 m. of the town. The par. church is a handsome Gothic edifice. It occupies an elevated situation on the outskirts of the town, has a fine light spire, and is altogether extremely elegant, and in the best taste. It cost nearly 7,000*l*. Here are also chapels belonging respectively to the Free church, Associate Synod, the Relief, and the Roman Catholics. There are Sunday schools in the par., of which the most important is the Douglas School, founded and endowed by a gentleman of that name, a native of the par., who died in Jamaica in 1799. Dr. Alexander Murray, the celebrated orientalist, was born (1775) in the neighbourhood, where a granite monument, 82 ft. in height, has been erected to his memory. Adjoining the town is Kirrouchtree, the seat of the Heron family.

NEWTONARDS, a town and sea-port of Ireland, co. Down, at the N. extremity of Lough Strangford, 10 m. E. Belfast, on the railway from Belfast to Donaghadee. Pop. 9,521 in 1861. The town has a large square and several good streets, in which are the parish church, a small Roman Catholic chapel, 3 Presbyterian meeting-houses, 2 for Methodists, and 1 each for Seceders and Covenanters, a large school on the foundation of Erasmus Smith, a spacious town-hall, a court-house, and a house of industry. The corporation, which, under a charter of James I., in 1613, consisted of a provost, 12 burgesses, and a commonalty, returned 2 mems. to the Irish H. of C. till the union, when it was disfranchised. A manor court sits every third Saturday for the recovery of debts to the amount of 10*l*. General sessions are held in June and December, and petty sessions on the first and third Saturday of every month. A constabulary force is stationed here. The weaving and embroidery of damask muslins are carried on to a considerable extent for the Glasgow manufacturers, and there is a large brewery. Markets on Saturdays; fairs on the second Saturday of every month, and on the 23d Jan., 14th May, and 23d Sept.

NEWTOWN, a parl. bor., manufacturing and market town, and par. of N. Wales, hund. of Newton, co. Montgomery, on the Severn, crossed here by a handsome stone bridge, close to the upper end of the Montgomery canal; 26½ m. SW. Shrewsbury, 152 m. NW. London by road, and 212 by Great Western railway. Pop. of bor. 5,916 in 1861. Newtown consists of a number of small treets, lined with mean-looking houses of lath and plaster. The town-hall is of brick, and there is a handsome modern cloth-hall. The church, an ancient structure in the English style, has a low square tower, surmounted by a wooden belfry; and another church is at present in the course of being erected. There are also several places of worship for dissenters, and numerous Sunday schools. Newtown is one of the most considerable towns in Montgomeryshire, and appears to be rising into greater importance, owing to the number of flannel manufactures carried on in its neighbourhood. The greater quantity of the Welsh flannel is made here; and the peculiar quality of the water is one of the causes assigned for the excellence of its woollen articles. The flannel markets (removed thither from Welshpool in 1832) are held on alternate Thursdays, and the quantity in the mart averages 400 pieces every market-day. The supply comes from every part of the country, and from many districts the flannel is sent in the rough, and finished or dressed at Newtown, where there are greater facilities of machinery and water. There are about 700 hand-looms in the town. The best weavers are never out of employ, but a great number of the middling hands are thrown out of work by the slightest depression of the trade. Machinery is also made on a considerable scale, and there are foundries, potteries, tanyards, and malt-houses, besides two joint-stock banks. From the extent of its trade, it is designated 'the Leeds of Wales.' Its communications are facilitated by the Montgomery Canal, which comes close up to the town, and connects it with the internal navigation of the central and northern districts.

The Reform Act made Newtown a parl. bor., contributory with Llanidloes, Welshpool, Machynlleth, and Llanfyllin, to Montgomery. The Boundary Act included with the par. the townships of Hendidley and Gwestydd. Registered electors of the united bors. 954 in 1865. Provision markets on Tuesday and Saturday: fairs first Tuesday in Feb., last Tuesdays in March and August, June 24, Oct. 24, and Dec. 16.

NEWTOWN, a decayed bor. and town of England, in the Isle of Wight, on the river of the same name, 5 m. W. by N. Newport, and 100 m. WSW. London. Pop. of bor. 99 in 1861. The town was anciently called Frankville, and is supposed to have been of some importance previously to its being burnt down by the French in the reign of Richard II. Notwithstanding its decayed condition, it sent 2 mems. to the H. of C. from the 27th Elizabeth down to the Reform Act, by which it was disfranchised.

NEW YORK, one of the U. States of N. America, and though not the largest, in every other respect the leading state of the Union. It extends between lat. 40° and 45° N., and the 73rd and 80th degs. of W. long. Its shape, exclusive of Long Island, at its S. extremity, is nearly triangular: it has E. Connecticut, Massachusetts, and Vermont; N. and NW. Lower and Upper Canada, being separated from the last by the St. Lawrence and Lakes Ontario and Erie; and S. Pennsylvania, New Jersey, and the Atlantic Length E. and W., including Long Island, 40 m.; greatest breadth, 310 m.; area, 45,658 sq. m. Pop. 3,880,735 in 1860. The state of New York may be described as an elevated region with extensive indentations in various parts below its general level. It is traversed by the Alleghanies, here divided into two principal chains, their highest summit, the Round Top, one of the Catskill group, being 3,804 ft. above the tide-level in the Hudson. The most remarkable depressions of the surface are the important valleys of the Hudson and Mohawk rivers, by means of which, and various canals, the basin of the St. Lawrence

Digitized by Google

is at many points placed in communication with the Atlantic. Besides the above rivers, it is watered by the Genessee, Oswego, Oswegatchie, St. Regis, Delaware, and Susquehannah. There are several lakes of considerable size, the principal being those of Champlain, Oneida, Cuyuga, and Seneca. Gneiss and granite are the most abundant primary rocks, and carboniferous slate, grauwacké, and limestone the principal transition and secondary formations. In the latter, to the S. of Lake Erie, many salt springs exist, a bushel of salt being obtained from 45 gals. brine. Iron is extremely plentiful in the N. part of the state, where a layer of argillaceous iron ore, yielding from 15 to 30 per cent., extends E. and W. for 200 m. Gypsum is very abundant, and highly useful in agriculture; it is used generally in the proportion of about a ton to 10 or 15 acres. An argillaceous limestone, which makes a valuable cement, lead, marble, and peat, are the other chief mineral products. Coal has been found, but only in small quantities. In this state there are numerous mineral springs, and Saratoga Springs and Balston Spa are the most frequented watering-places of their kind throughout the Union.

The *climate* is very variable; but an estimate of five years gives 40° Fahr. as the mean annual temp. of the whole state. Storms of thunder and lightning occur frequently in the summer, but the atmosphere is usually dry and serene, and the state is in general very healthy.

The *soil* in the S. is rather barren, but it improves on proceeding northward. Along the banks of the St. Lawrence, and in the region round the Oneida, it is well adapted for growing corn; upon the whole, however, the rearing of live stock is the most profitable branch of rural industry, and a large portion of the state, especially about its centre, is appropriated to sheep farming. The principal wheat district commences in the valley of the Mohawk, about long. 75°, and extends W. to the great lakes, including the fertile vale of Seneca and the Genessee country. The average produce of wheat is estimated at from 25 to 30 bushels the acre; but from 40 to 50 bushels are frequently reaped, and instances have occurred of upwards of 80 bushels of wheat and 25 of Indian corn per acre having been harvested. Apples, pears, and cherries succeed admirably well. The apples called the Newtown pippins, produced in this state, are superior to any produced in Europe, and are extensively imported into England. Owing to the comparative facility with which fresh land may be obtained, agriculture is in a backward state, though it is more advanced in this than in most other states of the Union. Artificial manures are rarely used. In the newly cleared lands, the richness of the mould and of the subsoil is all the farmer requires; he only endeavours, by clearing away the forest, to bring it forth. Amid the stumps of his trees he ploughs as he can, not as his judgment might dictate. In farms upon tracts long cleared, some attention is given to the rotation of crops, with a view to the preservation of fertility; but it is not uncommon to find the same field sown with wheat for a series of years, without the intervention of other crops. Heaps of straw, stable manure, and ashes, which would elsewhere be deemed treasures, are here regarded only as incumbrances; and the story of the farmer who reared his stables on a high foundation, that he might not be speedily compelled, by the accumulation of manure, to remove them, is scarcely an exaggeration. The appearance of the farm buildings agrees little with the obvious wealth of the country. The original log cabins still remain upon farms well cleared, well fenced, and under high cultivation; but they are gradually giving way to more commodious buildings, and in some cases to large and beautiful mansions. In the grazing counties the buildings are generally of a better character than in the grain-growing districts. Long Island and the adjacent co. Westchester, though comparatively unproductive, are more improved and better farmed than most other parts of the state, probably in consequence of their vicinity to the city of New York. Agriculture, however, is every where improving. Agricultural societies are to be found in almost every county, and the state government has contributed large funds for the promotion of their objects, especially in premiums for raising the best crops. In many parts, however, where the soil is inferior, grazing husbandry has been substituted for tillage, especially since the Erie canal has brought the produce of the more fertile counties on the W. of the state into competition with those of the E.

Land is almost always in the possession of the proprietors, except in the neighbourhood of the cap. and some of the larger towns. When it is let, it is generally on the *metayer* principle, the landlord providing half the seed, and receiving half the produce; and, in the case of pasture farms, half the stock belongs to the proprietor. The various crops raised are much the same as in Britain, with the addition of maize, for which our climate is not well adapted. Wheat is the most valuable crop; and the attention of the farmers seems chiefly directed to the raising enough of maize for home consumption only, and of wheat for sale. A good deal of buckwheat and rye is grown, but the degree of heat is not favourable for oats and barley. Potatoes, turnips, and other green crops are not at all general in large fields, neither are they so well managed as in well-cultivated districts in Britain. Maize is sown during the latter half of May in drills from 3½ to 4 ft. apart, and is harvested in October, or sometimes later. The hoe-weeding and cleaning of this crop is expensive; the whole work is performed by males, females never working out of doors. From 35 to 40 bushels an acre is considered a good average crop of maize; the same proportion of wheat is, however, considered a very abundant crop; and the average produce in that part of the United States where wheat is grown is said not to exceed 13 bushels, while in England it is estimated at 32 bushels or upwards. Hops are grown, but not extensively. Hay is easily made, the sun in the hay-making season being very powerful; and, like other crops in this state, it is seldom damaged by bad weather. Clover and all sorts of grass-seeds are used, and much more timothy is grown than in any part of Britain; but none of the pastures, except the alluvial land on the banks of rivers, have the beautiful appearance of English meadows; nor are highly-dressed fields anywhere to be found. Their requisite management, by frequent ploughings and rolling, is far too expensive to be attempted. The high price of labour is, in fact, the great obstacle to good agriculture, to the cultivation of green crops, and to adequate manuring. A tract of land is usually cleared by cutting or burning down the trees; and, for the first few years, abundant crops of corn are produced; but, as soon as the quantity of grain diminishes, the farmer either lays down his land in grass, and commences sowing on new land in the neighbourhood, or sells his cleared land, and proceeds elsewhere in quest of a new settlement. The virgin soil, consisting of an accumulation of vegetable mould from 6 to 24 inches deep, is abundantly fertile for a period; but the continuance of its fertility depends upon

Digitized by Google

the under-stratum on which it lies, this quality in the mould being soon lost by repeated ploughings. The productiveness of the soil in the S. and W. states of the Union, as well as in New York and New England, has, in fact, been prodigiously overrated; and the *el Dorado* of agriculturists has travelled westward, as new lands have been successively cleared.

Implements of husbandry are, upon the whole, well suited to the country; and their prices are not higher than in England. The two-horse plough, driven by the ploughman, is nearly universal, except on rough stony land; and ploughing is well executed. The cradle scythe is in pretty general use, a good workman cutting down an acre of wheat a day. Thrashing-machines are not so common as in Great Britain.

Orchards are very productive. Various sorts of excellent apples are grown, but a good deal of cider is made from crab apples. It is for the most part very inferior to the English, and sold at from 2 to 4 dollars the barrel of 30 wine gallons. Melons and pumpkins are raised for domestic use, and for cattle. Great exertions are making to improve the breeds of cattle and horses, by importations of the Teeswater cattle, and of stud-horses from England. Dairy products are highly important articles of trade. Milch cows sometimes give 10 or 11 lbs. of butter a week, and perhaps 20 quarts of milk a day. Oxen are much used for ploughing on rough lands, and, like horses, are well trained to their work. The price of ordinary horses is from 16*l.* to 25*l.* Sheep are less attended to than they deserve in a country where the dryness of the weather preserves them from diseases to which they are subject in England. The merinos, and crosses with them, are the breeds generally seen: mutton is of inferior quality. The great extent of the forests favours the breeding of hogs, which are good; and, before being killed, are usually fattened with maize or meal. Turkeys, guinea-fowls, and other poultry, are very numerous.

In the N. and SW. parts of the state much of the country is covered with forests, and the principal business of the inhabs. is the getting in and vending lumber. There is little or no underwood, and in cultivated tracts, wherever a sufficient quantity of land has been cleared, the woodland of a farm bears as high a price per acre as the land actually cleared. The trees are sometimes above 80 ft. in height. Numerous varieties of oak, the hickory, black walnut, chestnut, plane (*Platanus occidentalis*), maple, ash, beech, elm, tulip tree (*Liriodendron tulipifera*), here called poplar, and wild cherry, are ordinary trees, with red cedar and pine. The locust tree, which is not a native of the state, and the cedar, have been extensively planted, for the purpose, especially, of ship-building. The culture of silk has long been prosecuted, but on no extended scale.

New York is distinguished above every other state in the Union by her extensive water communications. Of these, the principal, formed partly by the navigable river, the Hudson, and partly by the Erie canal, 364 m. in length, from Albany on the Hudson to Buffalo on Lake Erie, unites the city of New York with the great American lakes, and makes her, in fact, the proper port of Upper Canada, and of all the vast and fruitful countries surrounding the lakes. Upper Canada may, indeed, be reached from Europe by way of New York, in less than half the time in which it can be reached by way of the St. Lawrence and Quebec, and with incomparably less risk. The Erie canal was begun in 1817, and was opened throughout its whole extent in 1825. Originally it was only 4 ft. deep; but provision was made, in 1835, for increasing its depth to 6 ft. Its first cost amounted to 7,143,789 dolls., and the expense of the enlargement was estimated at about 7 millions more. Buffalo, on Lake Erie, at the termination of the canal, is 698 ft. above the level of Albany on the Hudson, where it commences. It is joined by a branch canal with Oswego, on Lake Ontario, and by another branch canal with the Susquehannah, and consequently with the Chesapeake. This great work was undertaken at the expense of the state, and has been eminently successful, both in a national and a pecuniary point of view, the tolls, which are very moderate, amounting to about 3,000,000 dolls. a year. New York has also a direct communication with the basin of the St. Lawrence, by the Champlain canal. The latter, which may be regarded as the NE. branch of the Erie canal, connects the Hudson with Lake Champlain, which is united, by means of the navigable river St. John or Richelieu, with the St. Lawrence. Another important canal connects the Hudson with the Delaware. But, though of the greatest utility, the rapid increase of pop. and production in the states bordering on the lakes, and the fact that the Erie canal is annually shut up for some months by frost, made it most desirable that additional means of communication should be opened with the lake district. This was effected by the Direct Erie railway, which runs through the S. part of the state adjoining Pennsylvania.

Exclusive of this great railway there are a host of others in most parts of the state, and there are, indeed, but few countries so well supplied with railway accommodation. The ordinary roads are not so good as in some other parts of the Union. They are merely formed in a rough way, so as to keep off the water; and, after the melting of the snows, or heavy rains, they become almost impassable: in dry weather they answer their purpose tolerably well; and stage coaches travel over them at the rate of 6 or 7 m. an hour. The roads are made and kept in repair by the work of the inhabs. actually called out.

Manufactures are various and important. They include saw and grist mills, fulling mills, cotton factories, woollen do., iron works, distilleries, asheries, and tanneries.

The commerce of this state is very extensive, as she not only supplies her own wants, and exports her surplus produce, but also imports vast quantities of goods for the consumption of the northern parts of Pennsylvania, Ohio, Michigan, and other western states. Albany, Hudson, Buffalo, Whitehall, and other towns on these canals, are large emporiums. But the principal part of the trade, including nearly all the foreign commerce of the state, centres in New York city.

The *Legislature* consists of a senate of 32 members, elected for 2 years, and a house of representatives of 128 membs., chosen annually. The state is divided into 8 senate districts, each entitled to send 4 senators, and 1–4th part of the senate is elected annually. The governor and lieut.-governor are elected for 2 years; the latter presides in the senate, where he has a casting vote. The right of suffrage is enjoyed by every white male citizen above 21 years of age, who has resided for 12 months in the state, and for 6 months in the co. for which he offers to vote, and persons of colour possessed of a clear freehold of the value of 250 dolls. The salary of the governor is 4,000 dolls. a year; and the lieut.-governor receives 6 dolls. a day, and the senators and representatives 3 dolls. each every day during the session. The legislature meets annually at Albany on the first Tuesday of January, unless otherwise ordered. For judicial purposes the state is divided into 8 districts corresponding

Digitized by Google

with the senate districts; in each of which is a circuit court, with a judge having a salary of 2,500 dolls. a year. There is a civil and criminal court in each co., besides mayors' and justices' courts in the towns. The superior courts are a court of chancery, vice-chancellors' court, supreme court, and superior court for the city of New York. The chancellor and superior judges are appointed by the governor and senate, and hold office during approved conduct, or until the age of 60: the inferior judges are appointed by the same authorities for the term of 8 years. The common law of England, though with various modifications, forms the basis of the jurisprudence. There are 2 principal state prisons, at Auburn and at Sing-sing on the Hudson, about 35 m. above New York.

The principal religious sects are the Presbyterians, Methodists, and Baptists; the Episcopalians and Dutch Reformed are also numerous. The Episcopalians have a theological seminary at New York, the Presbyterians at Auburn, the Baptists at Hamilton, and the Lutherans at Hartwick. In no state is public instruction more fully carried out. There is a school fund, which amounted, on the 30th September, 1863, to 2,694,552 dollars, the produce of which is distributed among the townships on condition of their raising a sum equal to that which they have received from the state. The whole of these sums are expended in payment of teachers' wages; the erection of school-houses, and the establishment of libraries, being at the charge of the school districts. In each of the 8 senatorial districts, an academy for teachers has been established at the public expense. There are also between 60 and 70 high schools, besides Columbia, Union, Hamilton, and Geneva colleges, and New York university. Charitable institutions, as lunatic asylums at Utica, Blackwall's Island, Bloomingdale, deaf and dumb, and blind asylums are numerous. Paupers are supported by a rate on the counties to which they respectively belong, and are under the care of superintendents of the poor. In each co. is a poor-house, to which a farm of about 6,000 acres is attached. The militia consisted at the end of Sept., 1862, of 59 regiments, 26 brigades and 8 divisions, the total number of enrolled men being 766,905, while the organised portion included 22,154 officers and men. With certain exceptions, all able-bodied, free, white, male citizens between 18 and 45 years of age, are subject to military duty. The total debts of the state of New York, on the 26th of Sept. 1863, amounted to 109,258,147 dollars.

This country was first explored in 1609, by the English navigator Hudson, then in the service of the Dutch E. I. Company. It was settled by the Dutch soon afterwards, under the name of New Netherlands; but was conquered by the English in 1664, and bestowed by Charles II. on the Duke of York. On the accession of the latter, it reverted to the crown. New York sustained an important part in the revolutionary war: its independence dates from 20th April, 1777. It sends 31 representatives to congress.

New York, the largest and most populous city, principal sea-port, and commercial metropolis of the U. States; cap. of the above state, on the S. extremity of Manhattan Island, near the mouth of the Hudson river, on the coast of the Atlantic. Pop. 805,651, in 1860. The following table shows the progress of the population of New York city in the course of the present century:—

Census	Pop.	Census	Pop.
1800 . .	60,489	1840 . .	312,852
1810 . .	93,373	1850 . .	517,849
1820 . .	123,706	1860 . .	805,651
1830 . .	202,589		

Manhattan Island, which is long and narrow, has S. New York Bay, comprising the estuary of the Hudson, E. Long Island Sound, and W. the Hudson, all having deep water: on the N. it is bounded by a narrow channel, called Haerlem river, across which are several bridges. The approach to the city by sea is very fine, the shores of the bay being wooded down to the water's edge, and thickly studded with farms, villages, and country-seats. The view of the city itself from the bay is less prepossessing; for the ground on which it is built, though undulating, being nowhere considerably elevated, but little of it is visible from the water, and it has no very striking object to arrest the eye. It is of a triangular shape, bearing, in this respect, some resemblance to Constantinople. The oldest portion of the city, at the apex or S. extremity of the triangle, has, notwithstanding the important improvements effected of late years, many narrow, crooked, and inconvenient streets; but in all the more modern portions the streets are broad and straight, and generally cross each other at right angles. The present circuit of New York is about 10 m. Broadway, the principal street, is a long and spacious avenue, 80 ft. in width, extending in a straight line through its centre for nearly 3 m.; its upper or more northerly portion being lined with very handsome houses. This is the favourite promenade; and when the entire plan of the city is completed, it will extend to 8 m. in length. Many of the shops or stores in the Broadway and other principal streets are highly ornamented, and are fitted up with plate-glass windows similar to those of London. On one side the Broadway is an open space, of about 10 acres, planted with trees, and intersected by walks, having the city hall in its centre; and at the S. end of the same great thoroughfare is a vacant space called the Battery, commanding a fine view of the bay, and much resorted to by all classes.

The dwelling-houses in the central parts are as high-priced as in the best squares in London. The pavement all over the city is generally good, and the side pavements are broader than in British cities. The outside of the brick buildings is almost always kept painted, which gives them a clean, fresh, and cheerful appearance. The buildings for public institutions, and the churches, seem quite as numerous as in British cities, when the difference of pop. is taken into account. Many of these are large, but there is nothing in their architecture particularly requiring notice. The new exchange, built to replace one burnt down in 1835, of granite, in the Grecian style, is the finest public building in the city. It cost, inc. the ground, about 1,800,000 dolls. The custom-house, of white marble, also a magnificent building, cost 1,175,000 dolls. Previously to the erection of the two last mentioned edifices, the city-hall was the most imposing structure in the city. It is 206 ft. in length, by 105 ft. in depth, and 65 ft. in height, being enclosed within a massive iron railing. It has a front of white marble, and an interesting collection of portraits and busts of the presidents and other distinguished citizens of the U. States. Near the hall is a neat building, formerly a gaol, but at present appropriated to city offices; and in the rear is a range of brick buildings, called the New York Institution, and occupied by the Literary and Philosophical Society, the American Academy of the Fine Arts, and other bodies. The building for the 'University of the City of New York,' in Washington Square, is one of the finest of the other public edifices. It is of marble, in the English collegiate style, 180 ft. in length, by 100 ft. in width. The front is divided into five parts,

Digitized by Google

the chapel being in the centre, with wings, and flanked by towers on either side. The chapel, somewhat similar to King's College, Cambridge, is 55 ft. in width, and 85 ft. in depth. It has octangular turrets, and a window 50 ft. high and 24 ft. wide. Columbia College, and Astor House, the largest hotel in the Union, built of granite, 200 ft. by 150 ft., and having 390 apartments, are well worth notice. Trinity church, founded in 1696, in the Gothic style, with a steeple 198 ft. in height; St. Paul's, with an Ionic portico, and a spire 234 ft. in height; St. John's, on the construction of which more than 200,000 dollars have been expended; and St. Patrick's Rom. Cath. cathedral, the largest church in the city, are the best ecclesiastical edifices. The city hotel, 7 stories high, and comprising a large assembly room; 5 theatres; the custom-house, on the model of the Parthenon; the city lyceum, hospital, almshouse, bridewell, and gaol are among the other principal buildings.

New York has suffered at different times from destructive fires, of which the greatest occurred in 1835 and 1845. The latter destroyed about 300 houses and warehouses, with sundry public buildings. These conflagrations have, however, led, as similar visitations have usually done elsewhere, to the improvement of the city. The old wooden houses have been replaced by houses of brick, and the streets have been widened and otherwise improved.

New York formerly laboured under a great deficiency of water. But latterly this deficiency has been fully supplied by means of the Croton aqueduct, a work worthy of being ranked with the noblest of the old Roman aqueducts. It commences about 40½ m. from New York at the Croton river, the waters of which are collected by an immense dam. The aqueduct proceeding thence is arched over and under, being 6 ft. 3 in. wide at bottom, 7 ft. 8 in. at top, and 8 ft. 5 in. in height. It has a descent of 13·3 in. per mile, and discharges 60,000,000 galls. in 24 hours. It crosses the Haerlem river (separating Manhattan Island, on which New York is built, from the continent) on a bridge of stone, 1,450 ft. in length, with 14 arches, each of 80 ft. span, 110 ft. above tide water. The receiving reservoir has a water surface of 31 acres, and contains 150,000,000 galls.; the distributing reservoir covers 4 acres, is 36 ft. deep, and holds 21,000,000 galls. Thence the water is distributed over the city by means of iron pipes, from 6 to 36 in. diameter, extending, in 1849, to the length of 180 m., 2,800 ft. The entire cost has been 10,375,000 dolls. The water was partially introduced into the city, 4th July, 1842; but the works were not finished till 1845.

This ample supply of the finest water has made a great improvement in the cleanliness and salubrity of the town, in both of which respects there was, and still is, great room for improvement. Formerly there was hardly a sink or common sewer in the whole city: the night-soil was collected in pits, of which there was one in every house, and being conveyed to the nearest quay, was thrown into the river; but as these quays are made of timber with many projections, a great deal of filth was retained about them, producing in hot weather an abominable stench, and probably, also, originating the yellow fever by which the city was sometimes visited. But in these respects various desirable changes have been, and others are, in the course of being made.

New York inner bay forms one of the finest harbours in the world: it is about 8 m. in length N. to S., and has a breadth varying up to 5½ m. It may be entered from the ocean by three passages, the Narrows, East River or Long Island Sound, and Staten Island Sound; but the first is at once the best, and by far the most frequented, channel. The bar, at the mouth of the outer bay, between Sandy Hook Point and Long Island, has 21 ft. water at ebb tide; and as the water rises about 5 ft., the largest class of ships may enter the bay. Within the bar the water in the outer and inner bays, and in the Hudson, is so deep that ships of the largest burden lie close to the quays, and may proceed to a great distance up the river. The navigation of the bay is but rarely impeded by ice. The great strength of the tide and the vicinity of the ocean keep it generally open, even when the Chesapeake and Delaware bays are frozen over. In the bay near the city are Governor's, Bedlow's, and Ellis's Islands, all strongly fortified; and other fortifications are erected on the adjacent shores guarding the approach to the city. The navigation in entering the harbour is extremely easy, and were it not for the risk of vitiating ship insurances, the services of pilots would seldom be required. A light-house is erected on Sandy Hook Point, and there are two others, about 300 ft. apart, 4 m. S. by E. the foregoing, and 250 ft. above the level of the sea. A fourth light-house stands on Staten Island, on the left side of the Narrows. Vessels load and unload at the wharfs on both sides of the city, which are continually crowded with shipping.

Means of Internal Communication and Commerce.—The rise of the tide is felt in the Hudson so far as Troy, 160 m. above New York, and large vessels ascend to Albany, a little below Troy, affording the greatest facilities for the transport of produce from and to the interior. These natural advantages are trifling, however, compared with those which have been conferred on New York by the system of canals and railways with which she is connected. These have made her the grand emporium of a vast extent of fertile territory, and have given her an extent of internal navigation, inferior only to that enjoyed by New Orleans, and one or two other cities. She is now, in fact, not merely the 'port' of the state of New York, but in a great measure also of Upper Canada, and of the states of Ohio, Michigan, Indiana, and others in the west. Not only do the Erie canal and railway place her in direct communication with the countries bordering on the lakes, but the latter, being connected by the Ohio and Wabash canals, goods laden at New York and sent up the Hudson, find their way, without being unshipped, to the emporiums on the Mississippi and Missouri, and even to New Orleans. In consequence of these extraordinary facilities, the trade of New York is extremely extensive, and it will necessarily continue to increase with the rapidly increasing wealth and population of the vast countries of which she is the principal entrepôt.

The value of the merchandise imported at New York, in the years 1862 and 1863, was as follows:—

Imports	1862	1863
	Dollars	Dollars
Dry Goods . . .	56,121,227	67,274,547
General Merchandise	117,140,813	118,814,219
Specie . . .	1,390,277	1,525,811
Total Imports .	174,652,317	187,614,577

The imports of 1864 showed a great increase over the preceding years, having amounted to a total of 218,125,760 dollars, of which 144,270,386 dollars worth of general merchandise.

The exports from New York, in the same two years, were of the following value:—

Digitized by Google

Exports	1862	1863
	Dollars	Dollars
Domestic Produce . .	149,179,591	164,219,177
Foreign Free . . .	2,853,848	1,037,212
Foreign Dutiable . .	4,901,383	5,425,579
Specie and Bullion .	59,437,021	49,754,066
Total	216,371,843	220,466,034

The imports comprise an infinite variety of articles. The principal are cottons, woollens, linens, hardware and cutlery, earthenware, brass and copper manufactures, from Great Britain; silk, wine and brandy, from France and Spain; sugar and coffee from the Havannah and Brazil; tea from China; with spices, indigo, cochineal and dye-woods. The exports principally consist of wheat, flour, corn, rice, and cotton; beef, pork, butter, dried fish, and all sorts of provisions; furs, tobacco, coarse cottons, and other manufactured goods. The shipping of New York was as follows in the year 1863:—

	Vessels	Tons	Men
United States Vessels:			
Arrived	1,722	986,713	27,781
Cleared	1,160	776,613	21,679
British Vessels:			
Arrived	2,360	854,806	34,761
Cleared	2,554	1,014,049	37,602
All other Foreign Vessels:			
Arrived	1,022	540,828	26,594
Cleared	1,152	600,942	27,118

The following were the receipts of customs at the port of New York, 1859 to 1863 inclusive.

	Dollars
1859 . . .	38,834,242
1860 . . .	36,027,481
1861 . . .	21,714,981
1862 . . .	52,254,116
1863 . . .	58,886,054

New York is the greatest port in the U. States, or in the world, for the arrival of immigrants. The following table gives the number for the 13 years 1851–63:—

Year	Foreign	British	Passengers from Foreign Ports
1851	3,888	966	299,081
1852	3,822	1,013	310,335
1853	4,105	945	299,425
1854	4,173	809	331,809
1855	3,391	610	152,234
1856	3,809	719	159,284
1857	3,002	715	203,499
1858	3,483	685	97,632
1859	4,027	980	101,320
1860	4,451	1,132	126,627
1861	5,122	1,449	80,790
1862	5,487	1,919	94,607
1863	5,120	2,360	178,727

Ship-building is prosecuted very extensively at New York.

The communication of New York with Liverpool, London, Havre, Rio de Janeiro, and those foreign ports with which there is the greatest intercourse, is principally kept up by lines of packet ships, partly sailing vessels and partly steamers. They are the property of New York as well as of English merchants, and, being fitted up with every regard to safety and convenience, are, probably, the finest and fastest fleet of vessels in the world.

The city is divided into 19 wards, each electing annually an alderman and assistant aldermen. These together form the common council, but meet in two chambers, one called the board of aldermen, and the other the board of assistants. The mayor, formerly appointed by the governor and senate of the state, has, since 1834, been appointed by the electors of the city. The council possesses the legislative power in the city, subject to the approbation of the mayor; but in case of his refusal to sanction any ordinance, it may be passed by a majority of the whole number of the members of each board. The courts of the city are—the superior court; court of common pleas; courts of general and special sessions; the marine court, and police court. The university, chartered in 1831, and open for students in 1832, is subject to the inspection of 21 regents, including the governor and lieutenant-governor of the state, who have power to inspect all colleges and schools therein; but internally it is governed by a council of 32 shareholders with the mayor and 4 members of the common council for the time being. It has a chancellor and 11 professors, and affords instruction in all the usual branches of general science. The university course includes a period of four years for the degree of B. A. The price of tuition for the whole course is 18*l.* a year, or for single branches 4*l.* 10*s.* each. Columbia College, formerly King's College, established in 1754, has a president and 8 other professors, about 150 students, a library of 25,000 vols., and an estate valued at upwards of 500,000 dolls. The city has also an episcopal seminary, and various other sectarian high schools; a college of physicians; the American and New York lyceums; an historical and philosophical library, and mercantile library; medical, law, agricultural, horticultural, typographical, musical, and numerous other learned societies, with extensive libraries and reading-rooms; a chamber of commerce, board of trade, American institute for domestic industry; and mechanics' institutes, and academies of the fine arts and drawing. The New York hospital and Bellevue hospital are the principal of the numerous institutions for medical relief. There are admirable institutions for the blind and the deaf and dumb; a society for the reformation of juvenile delinquents; a fund termed 'Long Island Farms,' for the provision of destitute children; 4 savings' banks; and a great variety of other useful public institutions.

The city of Brooklyn, on Long Island, immediately opposite to New York, bears the same relation to the latter that Pera and Galata do to Constantinople. It stands on rising ground, and is laid out like New York, in streets running at right angles to each other. Its pop., which, in 1830, was 15,934, had risen, in 1850, to 96,838, and, in 1860, to 266,661, making it the third largest city in the United States, inferior only to New York and Philadelphia. Brooklyn has a navy-yard, a handsome city-hall, numerous churches, a municipal court, 2 lyceums, an academy, a collegiate institute for young ladies, many good private schools, several banks, insurance companies, and benevolent societies. It has steam cotton factories, many carding machines, cloth-finishing works, lead works, distilleries, rope-walks, and morocco-leather factories; and is a place of considerable trade. Steam-boats ply continually between it and New York, and it is connected by a railroad, 12 m. in length, with Jamaica, in the interior of Long Island. On Aug. 26, 1776, the British gained a victory over the American forces on Brooklyn Heights, which gave New York into their hands; of which city they retained possession till 1783.

New York, under the name of New Amsterdam, was founded by the Dutch in 1621, being given

Digitized by Google

with the rest of the colony to the Duke of York in 1664. In 1673 it was retaken by the Dutch, but in the succeeding year it fell again into the hands of the English. It was the scene of several of the events that preceded the outbreak of the revolution; and the first Congress of the United States under the new constitution was held in it in 1789.

NIAGARA, a large river of North America, celebrated for its cataract. The river of Niagara is that portion of the great river St. Lawrence in N. America, that extends between Lakes Erie and Ontario, the level of the former being 334 ft. above that of the latter. The Niagara river issues from the NE. extremity of Lake Erie, at Black-rock, near Buffalo, where it is ¾ m. wide, and runs northward about 35 m., embracing in its course numerous islands, and running over a high ledge of rocks, forms the *Great Falls*, the most stupendous cataract in the world. On flowing out of the upper lake, the river is almost on a level with its banks; so that any considerable rise of its level would make it lay under water the adjacent flat country of Upper Canada on the W., and of the state of New York on the E. For 3 m. from Lake Erie it has a rapid current; but it then becomes smooth and placid, and continues so till within a mile of the falls. About 5 m. from Buffalo the river widens, forming several islands, one of which, called Grand Island, 12 m. in length, comprises above 17,000 acres. Navy Island, belonging to the British, has an extent of 304 acres: the rest are much smaller. About 2 m. below Navy Island, on the left or Canadian bank, the river receives the Chippaway, which is connected with the Welland canal, the artificial channel of communication between the upper and lower lake. The shores on either side are but thinly settled. Between Buffalo and the Falls, a distance of 21 m., there are only 4 villages, two on either side. A few farmhouses are dispersed here and there; but, for the most part, the banks are covered with forests. 'The river, before reaching the falls, is propelled with great rapidity, being a mile broad, about 25 ft. deep, and having a descent of 50 ft. in half a mile. An island at the very verge of the cataract divides it into 2 sheets of water: one of these, called the Horse-shoe Fall, on the Canadian side, is 600 yards wide, and 158 feet in perpendicular depth; the other, called the American Falls, being about 200 yards in width, and 164 feet in height. The breadth of the island is about 500 yds. This great sheet of water is precipitated over a ledge of hard limestone in horizontal strata, below which is a somewhat greater thickness of soft shale, which decays and crumbles away more rapidly than the former stratum, so that the calcareous rock forms an overhanging mass, projecting 40 ft. or more above the hollow space below.' (Lyell's Geology, i. 261.) The depth of the water is much greater on the Canadian than on the American side; and hence, while the scarcely hidden rocks below the American Fall cause the flood to be broken into foam, the deep green hue of the billows beneath the Horse-shoe Fall is but slightly changed by the crests rising above them. The finest view of the falls, perhaps, is from the table rock on the Canadian shore, and from the banks above it. Another good view is from a boat crossing the river 200 or 300 yds. below the falls, both of which are thus seen to the greatest advantage. The rapids, however, are best seen from Goat Island, to which a very ingeniously constructed and strong rough bridge has been thrown, on the American side, over rapids and great blocks of rock. On the N. side of the island, the rocks, projecting into the river 200 ft. or 300 ft., immediately over the falls, are accessible by a second wooden bridge, below which the water runs with fearful velocity. From the rocks, the view over the precipice and great fall is terrific, absolutely appalling; although the prodigious volume of the tumbling waters is not so apparent at this spot as from the table rock and the boat.

The banks rise from the ravine perpendicularly above the river upwards of 180 ft., and hence artificial means are necessary for effecting a descent to the water's edge. Spiral staircases have been constructed both on the Canadian and American sides; besides which, a third was constructed, in 1829, at the lower end of Goat's Island, for the purpose of descending to a ledge actually underneath the fall. By these means the traveller is enabled to view the falling waters in almost every possible direction. 'The overwhelming sensations,' says a traveller, 'with which the spectator can hardly fail to be affected, are produced by the immense flood, precipitating at least 100,000,000 tons per minute, as well as by the stupendous mass and overpowering force of the roaring and falling waters. Every surrounding object, indeed, is viewed with indifference, while the mind is wholly absorbed in the contemplation of a spectacle so sublime, surpassing in majesty and grandeur and power all the works of nature that have ever arrested the attention, or presented themselves to the imagination.'—'To form a faint idea,' said the late Governor Morris, 'of the great cataract of Niagara, fancy to yourself the Frith of Forth rushing wrathfully down a deep descent, leaping in foam over a perpendicular rock 175 ft. high, then flowing away in the semblance of milk, from a vast basin of emerald. You will thus have some notion of the unparalleled, the petrifying influence with which these falls impress the beholder: but truly, as the poet says, the eye of man must see this miracle to comprehend it, or the feelings it produces.' These stupendous falls have attracted and continue to attract a large number of visitors, in consequence of which numerous hotels have been built on both sides the river. Many private villas have also been erected on the Canadian side.

After the river has passed over the falls, its character is immediately and completely changed. The waters, which had expanded at the falls to an entire width of 1,300 yds., including Goat Island, are again contracted after their union into a stream not more than 160 yds. broad; and the river then runs furiously along a deep wall-sided valley, or huge trench, which has been cut by the continued action of the stream during the lapse of ages. The cliffs on both sides are in most places perpendicular, and the ravine is only perceived on approaching the edge of the precipice.

By the continued destruction of the rocks, owing to the eddies and spray rushing against the soft shale strata, the falls have, within the last 50 years, receded upwards of 150 ft., or, in other words, the ravine has been prolonged to that extent. Through this deep chasm the Niagara flows with a constantly decreasing velocity for about 7 miles; and then the table-land, which is almost on a level with Lake Erie, suddenly sinks down at Queenstown, and the river emerges into a plain, continuing for 7 m. to Lake Ontario. There seems to be no reasonable ground for doubting that the falls were once at Queenstown, or 7 m. below their present position; and that, from the force of the water undermining and wearing away the rock, they have receded from Queenstown to where we now find them. This recession is still going on, at the rate of nearly 50 yards in 40 years; and consequently they seem destined, in process of time, to reach Lake Erie, which, being only about 70 ft. in depth,

Digitized by Google

would thus be completely drained. It is not unlikely, however, that, in the long interval that must thus intervene, some convulsion of nature may occur to change the comparative levels of the district. But supposing this not to occur, and that the falls recede to the lake, the probability is, from the accumulation of mud, and the gradual filling up of the lake that is now going on, that its principal portion will have been previously converted into dry land.

NICARAGUA (LAKE OF), the most considerable lake of Central America, comprised within the state of Nicaragua, and extending principally between the 11th and 12th degs. of N. lat., and the 84th and 86th of W. long., about 12 m. in a direct line from the Pacific, and 90 m. from the Caribbean Sea. It is of an oval shape: length, NW. to SE., about 130 m.; average breadth, perhaps, about 40 m. It has numerous creeks and harbours, and several islands. It receives a good many rivers, especially along its N., NE., and W. sides; its surplus waters are carried to the Caribbean Sea by the Rio San Juan, which issues from its E. extremity, and falls into the Caribbean Sea at San Juan de Nicaragua.

NICE (Ital. *Nizza*, an. *Nicæa*), a city and seaport of France, prov. Alpes Maritimes, on the Mediterranean, about 5 m. E. from the bar, 95 m. SW. Genoa, and 98 m. S. by W. Turin, on the railway from Marseilles to Genoa. Pop. 48,273 in 1861. The city is beautifully situated in a small plain at the foot of the Maritime Alps, by which it is protected from the N. and E. winds: while the cool sea-breeze, which prevails every day with a regularity almost equal to that of a tropical climate, moderates the summer heat. The principal disadvantage of its situation is that, being open on the W., it is exposed, with but little protection, to the influence of the *mistral*, or *vent de Bise*, which is often keen and piercing. It is encircled by bastioned walls, and has on the E. the steep rocky hill of Monte Albano, surmounted by the ruins of an old castle. The view from this hill is very fine, and at sunrise and sunset the island of Corsica is sometimes clearly distinguished, though it be some 70 or 80 m. distant. The port, which is small and protected by a pier, admits vessels of 300 tons burden, and is visited by the steamers from Marseilles and Genoa. Nice is divided into two parts by the river Paglione, here crossed by a good stone bridge. The old town has narrow and crooked streets, which, however, are kept very clean. The new town to the W. of the river is well laid out and handsome: it has a square surrounded by open arcades, and some of the houses near the sea, and in the vicinity, are very superior. The cathedral, several convents, 3 hospitals, the governor's residence, college, public library, theatre, and a fine arch erected in honour of Victor Amadeus III., are the principal public buildings. It has manufactures of silk twist, snuff, soap, essences, perfumery, and paper, a fishery of anchovies, and a considerable trade in the export of oil, wine, oranges, and hemp, and in the importation of corn from the Black Sea, salt fish, manufactured goods, and colonial produce. It is a bishop's see, and the seat of a royal council, and of the head court of justice for its div.

Nice, in common with Montpellier, enjoys the reputation of having a peculiarly genial climate, and is accordingly resorted to by numerous invalids, especially from England, during the months of November, December, and January. But at other seasons it is less suitable for invalids. In February, the *vent de Bise* begins to blow, and it is very trying to persons with delicate constitutions. This explains the singular discrepancies in the accounts of different travellers as to the climate of Nice.

A noble road, constructed at a vast expense, leads over the Maritime Alps from Nice to Turin. Another road, begun by Napoleon I., but not completed till 1827, leads along the sea coast from Nice to Genoa; and a third road is opened from Lyons to Nice, forming, exclusive of the railway from Marseilles, a shorter and better way of entering Nice than by Mont Cenis.

Nice is said to have been founded by colonists from Marseilles. Under the Romans it was originally the seat of a naval arsenal; but, under Augustus, the latter was transferred to Frejus. Nice formed part of Italy till the year 1860, when it was ceded to France to 'rectify the frontier,' and in return for the services rendered by the Emperor Napoleon III. to the independence of Italy. Among the celebrated individuals to whom it has given birth, are the painter Vanloo, the astronomer Cassini, and Marshal Massena, one of Napoleon's ablest generals.

NICOBAR ISLANDS, a group in the Indian Ocean, between the 3rd and 10th degs. of N. lat., and the 93rd and 94th of E. long., about midway between the NW. point of Sumatra and the Andaman Islands, and from 100 to 130 m. from each. Sambelong and Carnicobar, the former at the S. and the latter at the N. extremity of the group, are the principal. There are about half a dozen other islands of some consequence, and a number of small islets. Most of the islands are hilly, and all are covered more or less with dense woods of cocoa-nut, areca palm, and various timber trees. The climate is extremely unhealthy to Europeans, and is supposed to owe this quality, in great part, to the extensive spontaneous decomposition of vegetable matter. These islands are inhabited by a race of natives of the Indo-Chinese stock, whose inoffensive character contrasts strongly with the wild ferocity of their neighbours of the Andaman Islands. Their chief occupations are fishing, rearing hogs and poultry, a little agriculture, and trafficking among themselves and with foreigners who touch at the Nicobars. Cocoa and betel-nuts are met with in immense quantities, and most of the Indian ships bound eastward, call here to take in a cargo of the former, which they obtain at the rate of 4 nuts for a leaf of tobacco, and 100 for a yard of blue cloth. The natives also exchange fowls, hogs, birds' nests, ambergris, tortoise-shell, wild cinnamon, and sassafras, for iron, tobacco, cloth, silver coin, and other European goods. They live under a number of petty chiefs; but little is known of their internal economy and customs, the great insalubrity of the climate having successively broken up all the establishments formed on the Nicobars by the Danes and the British missionaries, in the latter half of the last century.

NICOLAEFF, a town and river port of European Russia, gov. Kherson, at the confluence of the Ingul with the Bug, about 20 m. above where the latter falls into the æstuary or liman of the Dniepr. Pop. 33,504 in 1858. Nicolaeff was founded in 1790, and was intended to be a great naval depôt, and the station of the Russian fleet in the Black Sea. It stands on an elevated healthy situation, covers a large extent of ground, and is extremely well built. The streets are wide and regularly laid out, and the private houses, which are mostly of brick, have a handsome appearance. Among the numerous public buildings may be specified the new church or cathedral, the admiralty, the town-house, the marine barracks, and the naval hospital. In the vicinity is an observatory. The admiral commanding the fleet in the Black Sea resides here; and here, also, are

Digitized by Google

the various offices connected with this department of the service, with schools for the instruction of pilots, ship-builders, and naval artillery.

Nicolaeff owes its existence to its river, which has its entrance without the bar of the Dniepr, and water sufficient to float large ships up to the town. There are extensive docks and yards for the building of ships; but the latter are, notwithstanding, mostly constructed at Kherson, being sent thither to be laid up, or, when necessary, repaired. Still, however, Nicolaeff has not, as its founders anticipated, become a large, thriving town. This is ascribable partly to the want of good water, and the scarcity and high price of fuel caused by there being no timber in its vicinity; partly to its harbour being, though very superior to that of Kherson, decidedly inferior to that of Sevastopol in the Crimea; and partly, and principally perhaps, to the great advantages enjoyed by Odessa as a commercial emporium. Nicolaeff is, in fact, nearly deserted by all the mercantile class, and depends entirely on the employment afforded by government.

NICOLAS (ST.), a town of Belgium, prov. E. Flanders, capital canton, on the railway from Ghent to Antwerp, 19 m. ENE. the former, and 12 m. WSW. the latter. Pop. 23,161 in 1860. The town is well built and handsome, and its inhabs. generally opulent. It has a fine town-hall, a parish church, in which are some good Flemish paintings, a hospital, 2 orphan asylums, a convent, a prison, and a large market-place, partially planted with trees. It has manufactures of woollen, cotton, and silk fabrics, hats, paper, soap, tobacco, and chocolate, with salt refineries, tanneries, breweries, dye-houses, and potteries. It has one of the largest markets for flax in Europe, and large annual fairs for cattle and horses. It is the seat of a tribunal of commerce, and sends 1 deputy to the states of the prov.

NICOPOLIS, a town of Turkey in Europe, prov. Bulgaria, cap. sanjiak, on the Danube, 100 m. E. by S. Widin. Pop. estimated at 10,000. It has an imposing appearance, being situated on a range of hills above a bay of the river, and surrounded by strong ramparts mounted with cannon. It is further defended by an ancient castle, and has several suburbs, in which the Greek and Bulgarian inhabs. principally reside. Generally it is ill built, but has some large houses and several handsome mosques and public baths. It is the seat of a Greek archbishop and a R. Cath. bishop: its position on the Danube gives it some commercial importance: it is, however, in a state of decay. Nicopolis was founded by Trajan, and some portions of its ancient walls are said still to exist. But it is chiefly memorable in modern times for the great battle fought in its vicinity, on the 28th of September, 1396, between the Ottoman army under Bajazet and that of the Hungarians and their allies under their king Sigismund. The latter sustained a complete defeat, ascribable as much to the rashness and presumption of the Count de Nevers and other French leaders, as to the bravery and superior discipline of the Turks.

NICOSIA, the principal city of the island of Cyprus, near its centre, on the small river Pedia; lat. 35° 13′ 11″ N., long. 33° 26′ 45″ E. Pop. estimated at 17,500, of whom about two-thirds are Turks. It stands on a low fertile plain, near the S. foot of a range of high mountains, and is surrounded by walls in the shape of a hexagon, flanked by 13 bastions. The ground of the enclosure is very unequal, being in some parts elevated to the height of the walls, and in others forming a deep valley. The streets are in general not more than 10 and 15 ft. in breadth; and, being unpaved, are always filthy, and, in winter, almost impassable. Having been the residence of the principal Venetian families during the period that the island was subject to Venice, it has many fine houses, which are now, however, mostly in ruins; and at present it consists principally of brick and mud huts. The bazaar, though tolerably well supplied, is not even arched, but roofed with reeds and mats, which admit the rain in all directions. Most houses have gardens, which abound with olive, lemon, and pomegranate trees; and hence the first view of the city is very pleasing, from the contrast between the foliage and the dark mountains to the N. There are 8 mosques, all of which were once churches, the principal having been the cathedral-church of St. Sophia, built by the Venetians; it is in the Gothic style, of an oblong shape, with a pentagonal projection at the end opposite the entrance for the reception of the altar. The interior is laid out in three aisles, divided by clumsy white-washed Corinthian columns. On the two belfries the Turks have erected two high and handsome minarets. There are still 6 Greek churches, and 1 Rom. Cath. and several Greek convents. The city has also 4 public baths, and a large but ruined caravanserai. It has some manufactures of carpets, printed cottons, and red morocco leather, and exports wine and cotton.

Nicosia is supposed to occupy the site of the ancient *Trimitus*, or *Trimithus*, mentioned as a place of some note by the Byzantine historians. When Richard I. of England took Cyprus in 1191, and conferred it on Guy de Lusignan, it was made the cap. of the new kingdom, and greatly enlarged. It fell, in 1480, to the Venetians, who built the present walls, and several churches and handsome palaces; and who held it, with the island, till 1571, when it was taken from them by the Turks, under whose sway it has since continued.

NICOSIA, a city of Italy, island of Sicily, prov. Catania, district of its own name, on two hills, 14 m. NE. Castrogiovanni. Pop. 13,630 in 1862. Like other towns in the interior of the island, it is remarkable for nothing but the number of its churches and convents. It has few manufactures, and hardly any export trade, but a considerable traffic in the corn and cattle of the surrounding country, which is very fertile. Its situation is such as to afford a strong military position; and it is supposed to be the ancient *Herbita*, founded in the earliest period of Sicilian history.

NIEVRE, a dép. of France, reg. centre, nearly co-extensive with the old prov. of Nivernais, between lat. 46° 40′ and 47° 35′ N., and the 3rd and 4th degs. of E. long.; having N. Yonne, E. Côte d'Or and Saône-et-Loire, S. the latter and Allier, and W. Cher. Area 681,656 hectares; pop. 332,814 in 1861. A mountain chain runs from SE. to NW. through its centre, dividing the basin of the Loire from that of the Seine; the culminating point of the chain in this dép. being 2,000 ft. above the sea. The Loire and Allier bound Nièvre on the W.: the other principal river is the Yonne. The Loire and Yonne are united by the Canal du Nivernais, which, commencing at Decize on the former river, is continued through the dépts. Nièvre and Yonne, for a distance of above 100 m.; but the work is not yet completed. The Nièvre, whence the dép. has its name, flows through its W. part, and after a course of about 25 m., generally southward, joins the Loire at Nevers. It turns many mills, but is navigable only for rafts or small boats. The soil is not, in general, very fertile. About 295,261 hectares are estimated to be in cultivation, 67,396 in meadows, 9,900 in vineyards, 3,607 in orchards and gardens, and

Digitized by Google

239,561 in woods. The fertile portions of the surface are comparatively well cultivated, and sufficient corn is produced for home consumption. The annual produce, in wine, is estimated at about 260,000 hectolitres; of which the white wines of Pouilly are the best. There are supposed to be about 132,000 oxen and cows, and 315,000 sheep in the dép.; but the breeds are not particularly good. The chief resources of Nièvre are in its forests and mines. Most of the small rivers, which are not navigable, have been adapted to floating down rafts of timber and fire-wood, a good deal of the latter being sent down the Yonne and Seine to Paris. The coal wrought near Decize is principally destined for the supply of Paris and Orleans. Lead, copper, and some other metals are found, but iron is by far the most important metallic product. Hardware and cutlery, at Cosne and La Charité, glass, and earthenware, especially at Nevers, linen and woollen cloths, and musical strings, are among the principal goods manufactured. Nièvre is divided into 4 arronds.: chief towns, Nevers the cap., Château Chinon, Clamecy, and Cosne.

NIGER, JOLIBA, or QUORRA, a celebrated river of Central Africa, having its sources near the extreme W. coast of the continent, in the country of the Mandingoes, in about 8° N. lat., and 6° W. long. It thence pursues a course NW. and N. to the 10th deg. of lat., and then follows a general NE. course to Timbuctoo, below which it turns SE., and afterwards S. and SW., to its mouth, in the Gulf of Benin. Supposed length about 2,300 m. The upper part of the Niger, called by the natives the Joliba, was first discovered in modern times by Mungo Park, who was sent out in 1795 by the African Association: he describes it at Sego, the cap. of Bambarra, as 'glittering in the morning sun, broad as the Thames at Westminster, and flowing slowly to the eastward.' (Travels, p. 220.) He succeeded in ascending it as far as Bammakoo, 250 m. above Sego, the cap. of Bambarra. From Cabra he sailed down the stream to Boussa, where, unfortunately, he was killed by the natives. Major Laing concluded, from information obtained in the neighbourhood, that the sources of the river were on the N. side of the mountains of Kong, at a height of 1,600 ft. above the sea, in lat. 8° 20′ N., and long. 9° 10′ W.; but Mr. Macqueen conjectured that the Alimar, its principal source, rises farther to the E. than Laing supposed. Lander, the servant of Captain Clapperton (who was murdered near Saccatoo), sailed from Boussa, with the stream, to the mouth of the river, previously called the Nun, in the Bight of Benin; and thus finally identified the Niger and the Quorra, and put an end to all the doubts and theories that previously existed as to the course and termination of the former. It hence appears that the length of the Niger, measured along its banks, exceeds 2,300 m.; and that its basin is nearly, if not quite, as extensive as that of the Nile. According to Caillié, it is navigable for large canoes within 100 m. of its source: for 200 m. below that point it has not been navigated by Europeans; but from Bammakoo to Timbuctoo it has been pretty accurately laid down, both by Mungo Park and Caillié. The river valley is here of considerable width, fertile, and comprising numerous towns and villages on either bank. The current of the river is not strong; and both travellers saw flotillas of canoes of 60 tons and upwards frequently passing up and down the river, which in the rainy season is flooded on both banks to a considerable distance. In about lat. 16 N. the stream expands, forming a lake, called Debo, which measures about 10 m. from N. to S., is from 12 to 15 ft. deep, calm, transparent, and surrounded by extensive marshes. Hence to Timbuctoo the valley becomes still wider; the pasturage of cattle, the tillage of rice, millet, and maize are extensively pursued, and along the banks are numerous villages, which export rural produce. In lat. 17° 30′ N. and long. 3° 10′ W., the river bifurcates, and on the N. and narrow branch is Cabra, the port of Timbuctoo: these branches, however, unite a few miles lower down.

The highest point of what may be called the lower Niger, hitherto visited by Europeans, is the neighbourhood of Yaúri (lat. 11° 20′ N. and 5° E.), which point Lander reached in 1830. Here the river leaves the great plain of Soudan, and enters the defiles of a mountain range crossing this part of Africa from E. to W., and probably connected, on one side, with the Djebel-el-Kumri, and on the other with the mountains of Kong. The direction of the stream from Yaúri, for about 150 m., is nearly due S.; but it is full of rocks and sand-banks, and wholly unnavigable, except at the time of the rains, and immediately after. Below Boussa, the banks on both sides are generally high and rocky; cultivated plains intervene in many places between the river and the mountains, but in others the offsets come close down to the water's edge. From Boussa downwards, the Niger is navigable for moderate-sized vessels; and in lat. 6° N., a little below Atta, it leaves the hilly country, and enters an alluvial plain, the lower part of which is an unhealthy swamp covered with jungle: many branches here diverge from the main stream, and at the mouth is an extensive delta, which however is, as yet, very imperfectly known. At Atta, the river is about 2 m. wide; and near Rabba, in lat. 8° 45′, it attains a width of 5 m.; but its breadth, close to the mouth, is somewhat less than a mile. The tide is said to extend within about 30 m. of Atta, or about 120 m. from the sea. The only branch of the Niger hitherto explored is the Chadda, which joins it on the left bank in lat. 7° 52′ N., 32 m. above Atta. It is quite equal in width, though not in depth, to the parent river, and has many shoals and sand-banks. The other tributaries of the lower Niger are the Saccatoo Mayarrow, and Coodoonia, all joining it on the left or E. bank: the former of these was discovered by Clapperton. Both rivers flow from a range of mountains, running NW. through Houssa, and forming the watershed between the tributaries of Lake Tchad and the Niger.

In the article AFRICA will be found a short account of the successive modern expeditions that have been fitted out for the purpose of exploring the course of this river, so long involved in doubt and obscurity; and though much still remains to be accomplished, its general course and leading features have been well ascertained. This, however, has not been done without a great sacrifice of human life. The inhab. of the countries in the lower part of its course are among the most degraded in the scale of human beings: the slave-trade is extensively carried on, and wars being continually waged between the different tribes, travellers are exposed to the greatest dangers. The climate also is extremely unhealthy.

The history of the Niger is involved in extreme obscurity. Herodotus was informed by the Greeks of Cyrene, that, in the interior of the African continent, a city had been reached by some Nasamon travellers, which was inhabited by negroes, and stood on the banks of a river containing crocodiles, and flowing from the W. eastward (ἀπὸ ἑσπέρης πρὸς ἠλιον ἀνατέλλοντα, ii. 32), which he conjectured to be the Nile. Now, as the Bahr-el-Abiad, or W. arm of the Nile, flows from W. to E., and

Digitized by Google

is certainly more likely to have been reached by the Nasamons than the Niger, the conjecture of the venerable father of history, that the river which they encountered was, in fact, the Nile, seems to be more consistent with probability than that of D'Anville, Rennell, and other learned moderns, who suppose that the city visited by the Nasamons was Timbuctoo and the river the Joliba of Mungo Park. The latter theory has, however, so far prevailed, that the name Niger is that which is now usually given to the river discovered and explored by Park and Lander. The word Niger, or Nigris, is first used by Pliny (Nat. Hist., v. 1–9), from whose somewhat confused account it would appear that there were supposed to be two rivers of that name, one in Mauritania, S. of the great chain of the Atlas, and the other in Æthiopia, thus briefly described:—'*Nigri fluvio eadem natura quæ Nilo: calamum et papyrum et easdem gignit animantes, iisdemque temporibus augescit.*' He seems, also, to have conceived that the Niger and Nile were united, and that there was a large water-system, having many branches, in the interior of Africa. The poet Claudian also entertained the idea of a similar connection :—

'Gir, notissimus amnis
Æthiopum, simili mentitus gurgite Nilum.'

Ptolemy furnishes a somewhat more detailed account of the river, and assumes that there are two separate streams in the interior of Africa, both having many branches (ἐκτροαί). and connected with lakes; the river most eastward he terms the Gir (Γειρ), that to the W. being the Nigir (Νίγειρ), communicating with the lake Libye, which may, perhaps, be identical with the lake Tchad, discovered by Denham and Clapperton. Ptolemy says nothing, however, respecting the course of the river, though he seems to have been of opinion that its waters were absorbed in lakes, or lost by evaporation. Edrisi, Abulfeda, and other Arabian geographers, conceived that the Niger (by them called *Nil-el-Abid*, 'Nigris Nileo') flowed westward, discharging its waters either into the Atlantic or some lake of the interior: and they represented it as rising from the same source as the Nile, and identified with it in the upper part of its course. Such seem to be the leading statements of the more celebrated of the old geographers respecting the Niger. It is doubtful, perhaps, whether the Greek and Roman writers really possessed any authentic information as to the rivers and lakes S. of the Great Desert, and, at all events, the statements now referred to, if they really apply to that part of the continent, are at once extremely limited and extremely vague. That the caravans, which appear from a very remote period to have maintained an intercourse between the countries to the N. and those to the S. of the Great Desert, should have fallen in with and had some knowledge of the Joliba, is far from improbable; and, perhaps, had any remains of the literature of Carthage come down to our times, they might have thrown considerable light on the question as to its identity with the Niger: but, with existing means of information, it would appear, notwithstanding the learning and ingenuity that have been brought to its investigation, to be all but insoluble.

NIJAR, a town of Spain, in Andalusia, prov. Granada, 15 m. ENE. Almeria, and 78 m. ESE. Granada. Pop. 2,038 in 1857. The town has two par. churches: its chief branch of industry is the manufacture of horse-cloths.

NIJNII-NOVGOROD, vulgarly *Nijegorod*, that is, Lower Novgorod, a government in the central part of European Russia, on both sides the Wolga, between lat. 54° 26′ and 57° 6′ N., long. 41° 40′ and 46° 38′ E., having N. the government of Kostroma, E. Kasan and Simbirsk, S. Penza and Tamboff, and W. Vladimir. Area, 18,740 sq. m. Pop. 1,259,606 in 1858. Surface flat or gently undulating; the soil, which consists principally of sand and black friable mould, is exceedingly fertile; and being well cultivated, this is one of the most productive provinces of the empire. Exclusive of the Wolga, several of its affluents, including the Oka, Betlouga, and Piana, traverse different parts of the government, which is well watered, at the same time that it is not marshy. There are some very large forests, those of the crown amounting to about 1,200,000 deciatines. The produce of the corn crops considerably exceeds the consumption. Hemp and flax are very extensively cultivated. Great numbers of cattle and horses are bred; and government is taking the most effectual measures to improve the latter. This is a considerable manufacturing, as well as a rich agricultural, district. Coarse linen, canvass, and cordage are the principal manufactured products; there are, also, some-iron works, with numerous distilleries and tanneries, soap-works, and glass-works. Commerce extensive and growing. The exports consist of corn and flour, cattle, horses, leather and tallow; the manufactured articles specified above, with iron, timber, potash, mats, glass, &c.

NIJNII NOVGOROD, NIJEGOROD, or NIJNII, the cap. of the above government, in the angle formed by the confluence of the Oka with the Wolga. Pop. 36,345 in 1858. The town stands partly on a steep hill, about 400 ft. in height, the summit of which is occupied by the kremlin or citadel, and partly on the low ground along the sides of the rivers. The citadel, from the ramparts of which there is a noble view of the Wolga, Oka, and surrounding country, contains the government offices, two cathedrals, built after the model of that of Moscow; an obelisk 75 feet in height, erected in honour of the deliverers of their country, the patriotic citizen, Minin, and Prince Pojarski, and other public buildings. The upper part of the town has several good streets, and being ornamented by numerous churches, placed in conspicuous situations, has an imposing appearance. The lower town consists principally of a very long street, bordering the Wolga. With the exception of the principal public buildings and a few private houses, the rest of the city is constructed of wood. Among the establishments are three convents, a bazaar, a gymnasium, and four primary schools, an ecclesiastical seminary, and a large military school. The town is ancient, having been founded in 1222. The kremlin was surrounded by strong walls and towers in 1508.

A bridge of pontoons leads across the Oka to the splendid new bazaars erected on the left bank of that river for the exhibition and sale of merchandise brought to the fair. These, which are divided into parallel rows or streets, are constructed of stone, roofed with iron, having covered galleries in front, supported by 8,000 iron pillars. They are built on piles, and to guard against the danger of inundation, the ground on which they stand was raised about 20 ft. Being enclosed on 3 sides by canals, and on the 4th by a navigable inlet of the Oka, there is every facility for the delivery and shipment of merchandise. The establishment is of very great extent, comprising about 2,500 booths; and is admitted on all hands to be at once the largest and most perfect of its kind that is any where to be met with. Including the church, dedicated to St. Macarius, the patron of the fair, it is said to have cost in all about 11,000,000 roubles.

Digitized by Google

Nijnii Novgorod has various manufactures, but it owes its great importance almost entirely to its commerce. It is the grand entrepôt for the trade of the interior of the empire, and has, in fact, a greater command of internavigation than any other city of the old world. Besides the corn, cattle, and other products of the surrounding country, the Kama, the principal affluent of the Wolga, conveys to Nijnii the salt of Perm; the gold, silver, copper, and other metallic treasures of the Oural mountains; the furs of Siberia; and even the teas of China. The silks, shawls, and other merchandise of Central Asia, and the fish and caviar of Southern Russia, come up the river from Astrakhan; while the manufactured goods of England and Western Europe, the wines of France, the cotton of America, and the sugar of Brazil are conveyed to her from Petersburg and Archangel, with both of which, as well as Moscow, she is connected by a line of railway, as well as by navigable rivers and canals.

Latterly the commercial importance of Nijnii has been vastly increased. Previously to 1817, the great fair, now held here, was held, in a less convenient situation, at Makarieff, lower down the Wolga. But the buildings for the accommodation of the merchants at Makarieff having been accidentally burnt down in 1816, government took advantage of the circumstance to remove the fair to Nijnii. It begins on the 1st of July, and continues for a month or six weeks, and is well known, not only over all Russia, but over most other countries of Europe and Asia. It is carried on within the bazaars already noticed, which were constructed by government for the accommodation of the traders, to whom they are let at moderate rents. The produce disposed of is classified as follows, viz. 1st, Russian produce, raw and manufactured; 2d, Merchandise from the rest of Europe, consisting principally of manufactured and colonial products; and, 3rd, Products of China, Bokhara, the Kirghises, and other Asiatic nations. The concourse of strangers, during the fair, is quite immense; so much so, that the population is then increased, according to the lowest estimates, by from 150,000 to 200,000 individuals. Here are seen dealers from India, China, Tartary, Bokhara, Persia, Circassia, Armenia, and Turkey; and from Italy, Poland, Germany, France, England, and even America. Amusement as well as business is attended to: theatrical representations, shows of wild beasts, and other Bartholomew-fair diversions, being got up for the entertainment of the multitude.

NIKOLSBURG, a town of Moravia, circ. Brünn, from which city it is 28 m. S. Pop. about 8,732 in 1857, a third part of whom are Jews. The town has a fine castle and grounds belonging to Prince Dietrichstein, an academy, a gymnasium, and several other superior schools; and in the castle is an extensive library, comprising many valuable MSS. The town is dirty and wretched; it has, however, manufactures of woollen cloth and other stuffs, and some trade in wine and marble, both produced in its vicinity.

NILE (Lat. *Nilus*; Gr. Νεῖλος, from νέα ἰλύς, "new mud," a large and famous river of NE. Africa, flowing N. through Abyssinia, Nubia, and Egypt, to the Mediterranean Sea, celebrated alike for its magnitude, the inexhaustible fertility which it confers on the 'land of Egypt,' its connection with some of the most interesting events in the remotest periods of authentic history, the great cities that were early built on its banks, and the stupendous monuments that still attest the wealth and power of their founders. The discovery of its real source was an object of intense curiosity to the ancients, as it remained, till within the last few years, to modern travellers and geographers. The words of Tibullus,

> 'Nile pater, quânam te possum dicere causâ,
> Aut quibus in terris, occuluisse caput?'

for many centuries expressed the feeling of the world.

The Nile is formed by the junction, at 15° 34′ N. lat. and 32° 30′ 58″ E. long., of two great arms, the *Bahr-el-Azrek* (the *Astapus* of the ancients), or Blue River, from the SE., and the *Bahr-el-Abiad*, or White River, from the SW. The sources of the former, which derives its name from the dark colour of its water, were discovered and described by Paez in 1618, and were subsequently visited by Bruce, who ridiculously pretended to have, for the first time, ascertained the true sources of the Nile, and thus solved a problem that had for ages occupied the attention of the learned world. This E. branch rises from two fountains near Geesh in Gojam, in Abyssinia, at an elevation of about 10,000 ft. above the level of the sea, in lat. 10° 59′ 25″ N., long. 36° 55′ 30″ E. It thence flows N. to the lake of Dembea, or Tzana, a large sheet of water which receives many other streams; but the Nile is said to preserve its waters with little intermixture with those of the lake, across which its current is always visible. Escaping from this lake it sweeps, in a southerly direction, round the E. frontier of the provinces of Gojam and Damot, till, within the 9th and 10th deg. N. lat., it takes a NW. direction, which it preserves till, at Khartoom, it unites with the other great arm, the Bahr-el-Abiad, flowing from the SW. The Bahr-el-Azrek receives in its course several important tributaries, and is in several parts interrupted by cataracts, one series of which has a fall of 280 ft. At the point of junction with the other great arm, it is about ¼ m. in breadth, and has a rapid current; but, during half the year, its waters are low.

The W. arm, Bahr-el-Abiad, or White River, derives its name from the fine whitish clay usually suspended in, and colouring, its waters. It is broader and deeper than the E. arm, brings down a larger volume of water, and appears to have been regarded in antiquity as the true Nile. If, however, the derivation of the name previously given be correct, the Bahr-el-Azrek would seem to have the best right to be considered the genuine Nile, inasmuch as it carries down the greater portion of that mud whence its name has been derived, and the deposits of which have, in the lapse of ages, formed the land of Egypt. The course of the Bahr-el-Abiad was traced, in 1827, by Linant, for about 160 m. from its confluence with the Bahr-el-Azrek. (Geog. Journal, ii. 171–187.) A party, sent by the pacha of Egypt on a slaving expedition, subsequently traced it to a much greater distance, or to a point in about the 10th deg. of N. lat. and 29th deg. of E. long.; and at this point no mountains were in sight, the river being, also, of great breadth, full of islands, and shallow. The course of the Bahr-el-Abiad, so far as it was up to this time explored, was little further than to its junction with the Bahr-el-Azrek. At the point of confluence, the Bahr-el-Abiad is only about 1,800 ft. across; but a little above it enlarges much, its banks being frequently 3 and 4 m. apart, and in some places during the inundations the waters extend 21 m. from side to side. In its ordinary state, and in mid channel, it has here from 3 to 4 fathoms water.

The honour of discovering the real source of the Nile belongs to three English travellers, Captains Grant and Speke, officers in the Indian army, and Mr. Samuel Baker, a daring and indefatigable ex-

Digitized by Google

plorer, who greatly assisted the two first named. The history of Nile discovery may be best told in a letter addressed by Mr. Baker to the president of the Royal Geographical Society, bearing date Khartum, April 30, 1865. 'I had,' writes Mr. Baker, 'the good fortune to meet Captains Speke and Grant at Gondokoro, in February, 1863. The object of my expedition being attained by meeting them, and by their discovery of the Victoria Nyanza Nile-head, I should have returned with them, had not Captain Speke reported that he had heard of a lake called by the natives Luta Nzigé. This, he imagined, might be a second source of the Nile, and I at once determined to attempt its exploration.

'My boats departed from Gondokoro for Khartum with Captains Speke and Grant, but when I was about to start, the whole of my men mutinied and refused to proceed, retaining possession of my arms and ammunition. The ivory traders of the place combined to prevent any European from penetrating the interior, fearing travellers' reports upon the slave trade. The chance of being able to proceed appeared hopeless. Being resolved not to be driven back, and finding it impossible to lead my men south, I at length induced eighteen of my mutineers to accompany me to the camp of one of the traders, ESE. of Gondokoro about 80 m., whence I hoped to be able to alter my course. Having loaded my camels and asses, I started at night, without either interpreter or guide, neither of whom were procurable, all the natives being under the influence of the traders. On passing the station of an Arab trader, six days from Gondokoro, my men, who had previously conspired to desert me at that spot, again mutinied; several absconded with arms and ammunition, and joined the trader's party. They however, with the entire party, were massacred by the Latooka tribe, two days after their desertion.

'A day's journey in advance of that station I met an Arab trader, whose heart I gained by presents. I persuaded him to supply me with porters, and to accompany me to the Unyoro country, where he might commence a trade with King Kamrasi. Thence I intended to strike west in search of the lake.

'Owing to a succession of difficulties and delays I did not arrive at Kamrasi's capital, M'rooli, N. lat. 1° 37″, until the 10th of February, 1864. The trader's party returned to Gondokoro, leaving me with my escort of thirteen men to proceed. After eighteen day's march I reached the long wished-for lake, about 100 m. W. of M'rooli, at Vacovia, in N. lat. 1° 14′. In respect for the memory of our lamented prince, I named it (subject to Her Majesty's permission) the "Albert Nyanza," as the second great source of the Nile—second, not in importance, but only in order of discovery, to the Victoria Nile-head. The Victoria and the Albert lakes are the indubitable parents of the river.

'The capital of Unyoro (M'rooli) is situated at the junction of the Nile and Kafoor rivers, at an altitude of 3,202 ft. above the sea level. I followed the Kafoor to lat. 1° 12′ N., to avoid an impassable morass that runs from north to south; upon rounding this I continued a direct westerly course to the lake. The route throughout is wooded, interspersed with glades, thinly populated, with no game. My route lay over high ground to the north of a swampy valley running west: the greatest elevation was 3,686 ft. The rocks were all gneiss, granite, and masses of iron ore, apparently fused into a conglomerate with rounded quartz pebbles.

'The Albert Lake is a vast basin lying in an abrupt depression, the cliffs which I descended by a difficult pass, being 1,470 ft. above its level. The lake level is 2,070 ft., being 1,132 ft. lower than the Nile at M'rooli; accordingly, the drainage of the country tends from east to west. From the high ground above the lake no land is visible to the south and south-west; but north-west and west is a large range of mountains, rising to about 7,000 ft. above the lake level, forming the western shore, and running south-west parallel to the course of the lake. Both King Kamrasi and the natives assured me that the lake is known to extend into Rumanika's country to the west of Karagwé; but from that point, in about 1° 30′ S. lat., it turns suddenly to the west, in which direction its extent is unknown. In N. lat. 1° 14′, where I reached the lake, it is about 60 m. wide, but the width increases southward. The water is deep, sweet, and transparent; the shores are generally clean and free from reeds, forming a sandy beach.

'I navigated the lake in a canoe formed of a hollow tree for thirteen days from Vacovia, arriving at Magungo, at the junction of the Nile with the lake, in N. lat. 2° 16′. The voyage was long, owing to the necessity of coasting, and to the heavy sea, which, with a westerly wind, generally rose at 1 p.m. daily.

'At the Nile junction the lake had contracted to a width of about 20 m.; the shores were no longer clean, but vast masses of reeds, growing in deep water, prevented the canoe from landing. Mountains had ceased on the eastern shore, giving place to hills about 500 ft. high, which, instead of rising abruptly from the lake, like the mountains further south, were 5 or 6 m. distant, the ground descending in undulations to the lake. The entrance of the Nile is a broad channel of deep but dead water, bounded on either side by vast banks of reeds. From this point the lake extends to the north-west for about 40 m., and then turns to the west, contracting gradually; extent unknown.

'About 20 m. north of the Nile junction at Magungo, the river issues from the great reservoir, and continues its course to Gondokoro.

'I went up the Nile in a canoe from the junction; the natives would proceed no further north, owing to the hostile tribes on the lake shores. About 10 m. from the junction the Nile channel contracted to about 250 yards in width, with little perceptible stream, very deep, and banked as usual with high reeds, the country on either side undulating and wooded. The course from the junction up the river being east, at about 20 m. from Magungo, my voyage suddenly terminated; a stupendous waterfall of about 120 ft. perpendicular height stopped all further progress. Above the great fall the river is suddenly confined between rocky hills, and it races through a gap, contracted from a grand stream of perhaps 200 yards width to a channel not exceeding 50 yards. Through this gap it rushes with amazing rapidity, and plunges at one leap into a deep basin below.'

The fountain-head of the Nile, Lake Albert Nyanza, forms an immense basin far below the level of the adjacent country, and receives the entire drainage of extensive mountain ranges on the west, and of the Utumbi, Uganda, and Unyoro countries on the east. Eventually receiving the Nile itself, it adds its accumulated waters, and forms the second source of that mighty river. The voyage down the lake is extremely beautiful, the mountains frequently rising abruptly from the water, while numerous cataracts rush down their furrowed sides. The cliffs on the east shore are granite, frequently mixed with large masses of quartz. On the eastern borders of the lake much salt is obtained from the soil. This forms the trade

Digitized by Google

of the miserable villages which at long intervals are situated on the Unyoro shore. The natives are extremely inhospitable, in many cases refusing to sell provisions. Mallegga, on the west coast of the lake, is a large and powerful country, governed by a king named Kajoro, who possesses boats sufficiently large to cross the lake. The Mallegga trade largely with Kamrasi, bringing ivory and beautifully-prepared skins and mantles in exchange for salt, brass-coil bracelets, cowries, and beads, all of which articles, excepting salt, come from Zanzibar, *viâ* Karagwé, there being no communication with the west coast of Africa. The actual length of the Albert Nyanza, from south to north, is about 260 geographical miles, independent of its course to the west, between 1° and 2° S. lat., and of its similar course in the north, in lat. about 3°.

The great united main stream of the Nile, after the junction of its two arms, takes a generally N. direction, but with almost innumerable windings. Not far below the point of confluence is a low range of mountains, through which the river rushes in a narrow gorge, forming what is called the sixth cataract; and thence deflecting eastward through extensive and verdant plains, it passes the cap. of Shendy and the ruins of the ancient Meroë. It receives, close to the town of Addamer (lat. 17° 45′ N.), the waters of its important tributary the Tacazzé (the *Astaboras* of the ancients), which has its sources in the high lands of Lasta, in Abyssinia, in lat. 11° 40′ N., long. 39° 40′ E., about 2½° E. of Lake Dembea, pursuing thence a pretty uniform course NNW. to its junction with the Nile. From this point to its embouchure, a distance of about 1,350 m., the Nile receives no affluent whatever, either on its E. or the W. bank; a solitary instance, as Humboldt has remarked, in the hydrographic history of the globe.

At Abu Hamed, in about 19½° N. lat., and 33° E. long., the river, which had previously been following a northerly course, turns suddenly to the W., and thence pursues a south-westerly course to Edab, in the prov. of Dongola, in the 18th deg. of lat., where it again curves round to the N. This deflexion is called the Great Bend of the Nile. In its course through Dongola, the valley on each side is very circumscribed. The river enters Lower Nubia in about 19° 40′ N., where it is precipitated over a ledge of granite rocks, forming what is commonly called the third cataract. Under the 22nd parallel occurs the second cataract, of Wady-Halfa. The first, or lowest, cataract is that of Assouan (an. *Syene*), near the island of Elephantine, where the river has cut its way through a ridge of granite rocks. It must be observed, however, that the term 'cataract,' as applied to the broken course of the Nile, bears no analogy to the great cataracts of Niagara, the Pisse-Vache, and others; for most of them scarcely exceed a few feet in height, and are, in fact, rather rapids than cataracts. In a portion of Lower Nubia the river-valley is very much contracted; the rocks on both sides approach the shore so closely as to allow little space for the deposit of alluvium; and in other places on the Libyan side, the sand covers the whole level space between the hill and the bank. At Kalabsheh, the an. *Talmis* (which has a temple bearing a close resemblance to the temples of Tentyra, Edfou, and Philæ), the river rises from 30 ft. to 40 ft. during the floods; and, after their subsidence in Feb., the stream flows at the rate of 2 or 3 nautical miles an hour. (Geog. Journ., vol. ix. part 3.) The Nile, after entering the boundaries of Egypt at Philæ, 6 m. from Assouan, runs in a quiet and very tortuous stream, though generally northward, through the whole length of the country, enriching it by its waters and its deposits, which, indeed, not only give to Egypt its fertility, but make it habitable. But, with the exception of the district of Fayoum, the valley of the Nile in Upper and Central Egypt is of very contracted dimensions, the mountains and the burning sands of the desert encroaching so closely upon it, that it seldom exceeds 10 m. in width, and is frequently not half so much. But how limited soever, this narrow strip is of extraordinary beauty and fertility, and contains the magnificent remains of some of the noblest and most populous cities of the ancient world.

In antiquity, the Nile seems to have poured its waters into the sea by seven mouths; but it has now only two mouths, those of Rosetta and Damietta. The former, or most westerly, has a breadth of 1,800 ft., with a depth of about 5 ft. in the dry season. The Damietta mouth is only 900 ft. wide; but its depth averages between 7 ft. and 8 ft. when the river is lowest. The greatest breadth of the Delta is about 85 m. from E. to W., the distance of its apex from the sea being rather more than 90 m. Great changes have, however, taken place in it during the lapse of ages; the soil has not only been elevated many feet by alluvial deposits, but its shape and the position of its apex have greatly altered even within the period of modern history. The river begins to swell in its higher parts in April, and even earlier in the Bahr-el-Abiad; but at Cairo no increase occurs till the beginning of June, its greatest height at that city being in September, when the Delta is almost entirely under water. The waters begin to subside in Nov., leaving a rich alluvium, which is the great source of the fertility of Lower Egypt. '*Quotannis certis diebus, præcipue circa solstitium æstivum, aucto magno per totam spatiatus Ægyptum, terram pluviis omnibus destitutam aquis suis irrigat, limo tegit, et fecundissimam efficit. Unde unica spes Ægyptiis in Nilo posita est, quia fertilis aut sterilis annus est, prout ille magnus aut parcior fluit.*' (Cicero, De Nat. Deor., i. cap. 52.) It need not, under such circumstances, cause surprise, that the ancient Egyptians regarded the Nile as a god to whom they paid divine honours. The greatest breadth of the river may be estimated at 2,000 ft., or about twice the width of the Thames at London Bridge. Its average current does not exceed 3 m. an hour. The water is always muddy; and even in April and May, when it is clearest, it has a cloudy hue. When it overflows, the colour is of a dirty red, consisting chiefly, we believe, of the red-clay deposit of the Bahr-el-Azrek; for, as already stated, the Bahr-el-Abiad brings down only a fine whitish clay. The Nile abounds with a great variety of fish, such as the *Labrus Niloticus*, or white trout, the *Muræna anguilla*, and a large species of salmon. The *Oxyrynchus* of this river, so famed in the antiquities of Egypt, is, according to D'Anville, the fish now called *Keshee*. None of the fish, however, except eels, have any very close resemblance to those of Europe. Among the waterfowl of the Nile, the most characteristic is the Turkey-goose, or *Anas Nilotica*, the flesh of which is both palatable and salubrious. From Assouan down to Cairo, about 360 m., the banks, except in the rocky parts, present no native plant, but abound with all sorts of esculent vegetables, raised by the industry of the inhabs. on this peculiarly fertile soil. Cultivation, however, is more common on the E. than on the W. bank of the river. Hippopotami are found in Nubia, but not in Egypt; the crocodiles, also, are greatly reduced in number, and are now confined to the district above Assiut.

NIMEGUEN, or NYMEGEN (probably the an.

Digitized by Google

Noviomagum, a town of Holland, prov. Guelderland, cap. arrond., on the Waal, 9½ m. S. by W. Arnheim, and 53 m. SE. Amsterdam, on the railway from Cologne to Utrecht. Pop. 21,625 in 1861. The town stands on several small but steep hills, and is strongly fortified. Though not ill-built, it has an irregular appearance, the streets being narrow; and, on account of the abrupt elevation from the river, the windows of one range of houses overlook the chimneys of another. Among the public buildings worth notice are an old edifice, said to have been raised by the Romans, and now forming part of the fortifications; the old castle of Valkenof, believed to have been built by Charlemagne, and the town-house, an edifice of considerable beauty. Several of the churches are likewise entitled to attention; and a high tower, called the Belvidere, is much resorted to by visitors, on account of the extensive view which it commands of the course of the river and the surrounding country. Nimeguen is the seat of tribunals of primary jurisdiction and commerce, and the residence of a military commandant and a receiver of taxes. It has a branch of the Society of Public Good, a commission of agriculture, and a Latin school. It produces Prussian blue, and has some tanneries; but the only article for which it is celebrated is its pale beer, sent to almost every part of the Netherlands.

Nimeguen is known in history from the treaty concluded here, in 1678, by Spain, France, and Holland. It was taken by the French on the 8th Sept. 1794, after a severe action, in which the allies were defeated. Various Roman antiquities have been discovered in and about the town.

NIMES, or NISMES (an. *Nemausus*), a city of the S. of France, dép. Gard, of which it is the cap., in an extensive and fertile plain, near the Vistre, 23 m. WSW. Avignon, and 30 m. NE. Montpellier, on the railway from Avignon to Montpellier. Pop. 57,129 in 1861. The distant view of Nimes is not imposing. Notwithstanding its numerous fine edifices, it has only the *Tourmagne* to render it conspicuous at a distance. The city-proper, which is surrounded by boulevards, on the site of the ancient fortifications, is confused and irregular with narrow streets and ill-built houses. But the boulevards and suburbs, which comprise three-fourths of the houses, are regularly laid out, clean, and have numerous handsome modern buildings and fine public promenades.

Nimes is principally interesting on account of its remains of antiquity, of which it probably possesses more than any other city of Europe, Rome excepted. The most classical, though not the most extensive, of these is the oblong temple, absurdly called the *Maison-carrée*, nearly in the centre of the city. This edifice was supposed, from an inscription discovered on its frieze, to have been built in honour of Caius and Lucius Cæsar, grandsons of Augustus; but, from subsequent discoveries, it would appear to have been erected to the adopted sons of Antoninus Pius. At any rate, it dates from the finest period of Roman art, and is one of its most perfect remains. It is raised on a platform ascended by 15 steps, and has 30 Corinthian columns, 6 in the front and at the back, and 9 on each side, exclusive of those at the angles. The portico, which is of ample dimensions, is supported by six detached columns in front, and two on either side: the other columns on the sides and back of the building are sunk half way into the walls. The capitals of the columns, and the frieze, cornice, and other parts of the building, are profusely adorned, in the most exquisite taste. The measurements of this edifice are as follow:—length, 82½ ft.; breadth and height, 40¼ ft. each; height of the platform on which it stands, 18½ ft.; height of the stylobate, 9¾ ft.; height of the doorway, 23½ ft.; breadth of do., 10⅝ ft. The columns, which are about 30 ft. in height, have a height equal to 10¼ diameters. (Frossard, Tableau Pittor. de Nismes, ii. 171.) The *maison-carrée* was considerably injured in the middle ages; but it is protected from future spoliation by being enclosed within an iron pallisade, and since 1823 it has been employed as a museum of paintings and antiques.

The amphitheatre of Nimes is admitted to be the most perfect structure of its kind extant, after that of Verona. It stands on one of the boulevards, surrounded by a large open space, on which no buildings are allowed to be erected. It is said to have been founded by Antoninus Pius. Its longest external diameter is 437 ft.; its shortest 332⅝ ft.: it has 32, or, according to some authorities, 35, ranges of seats, and is variously estimated as having sufficient accommodation for from 17,000 to 23,000 spectators; the height of the building outside is from 68 to 104 ft., and its total external circ. is 1,174½ ft. (Frossard, i. 135.) Though it was occupied by the Visigoths, and afterwards the Saracens, as a fortress for their defence against the Franks, the outer wall is still nearly entire. It consists of two stories, each having 60 arches, and an attic story, and is entered by four gates, one at each of the cardinal points, the principal being on the N. side. The arcades of the ground-story are separated by pilasters, those of the upper by columns, in an irregular Tuscan or Doric style. The interior is in many parts dilapidated and overgrown with vegetation; but it still serves for bull-baits, jousts, and dramatic entertainments, to which the modern inhabs. of Nimes are as much addicted as their ancestors were to the more barbarous exhibitions of gladiators.

A few portions of the ancient walls still remain, principally in the *Portes d'Auguste* and *De France*: the first, which, in the time of the Romans, was the principal gate of the city, consists of 2 large and 2 smaller arches: the former, which are in the middle, have between them a small Ionic column, respecting which there has been much controversy, all the other decorations of this gate being of the Corinthian order. The *Porte d'Auguste* is elaborately ornamented with sculptures, which constitute one of the principal points in which it differs from the *Porte de France*. In the NW. part of Nimes is a ruined *nymphæum*, or Roman bath, of considerable size, improperly termed the temple of Diana. Near this, on a height overlooking the city, is the *Tourmagne* (turris magna), a tower supposed to have been built by the Greek colonists of the city before the Roman invasion, but the original purpose of which has not been correctly ascertained. It is in the Doric style; its lower part being heptagonal; its upper, octagonal. It is in great part ruined; but being still 100 ft. in height, and in a conspicuous position, it is used to support a telegraph. The above are the principal objects of architectural interest in the city. The Vandals, and other barbarians, are said to have destroyed the basilica of Plotinus, the temples of Apollo, Ceres, Augustus, &c.; but the still existing memorials of antiquity are more than sufficient to evince the almost unequalled magnificence of the ancient city.

Nimes does not, however, owe its sole interest to its antiquities. It has several large, and some good, modern edifices. The cathedral, begun in the 11th, but principally constructed in the 16th and 17th centuries, has little to recommend it, except its occupying the site of the temple of

Digitized by Google

Augustus, but the *Palais de Justice* on the esplanade, the *Hôtel Dieu*, principally rebuilt in 1830, the general hospital, the new theatre, several of the churches, and the public library, are handsome, well-contrived buildings. A large fortress to the N. of the city was constructed by Vauban, on the site previously occupied by the basins that received the water brought thither by the aqueduct, of which the *Pont du Gard* forms a part. It is now the central prison for the S. déps. of France, and has usually about 1,200 inmates. The bishop's palace, episcopal seminary, college, and large barracks are the other principal public buildings. The esplanade, contiguous to the amphitheatre, and the *Cours Neuf* are among the finest promenades. The last-named extends quite through the W. part of Nimes from N. to S., and leads to the fine and extensive *Jardin de la Fontaine*. This garden derives its name from a large and handsome fountain, and has in it many statues and other Roman antiquities, besides the *nymphæum* mentioned above.

The *Pont du Gard*, above alluded to, formed part of a superb Roman aqueduct, 25½ m. in length, which conveyed a supply of water from the neighbourhood of Uzes to Nimes. There are no certain details as to the founders of this great work, the era of its construction, or the purpose for which the water brought by it was employed. Some antiquaries have ascribed its erection to Agrippa, son-in-law of Augustus, about *anno* 19 B.C., while others have ascribed it to Adrian, or his successor Antoninus, who derived his origin, by the father's side, from Nemausus. But, by whomsoever constructed, it was worthy the most brilliant era of Roman power. The Pont du Gard consists of that part of the aqueduct which was thrown across the river Gardon, in a wild defile, 11 m. NE. Nimes. It consists of 3 rows of arches, or, as it were, 3 different bridges, raised the one above the other, the whole being constructed of large stones, without cement. The first, or lower tier or bridge, has a length of 529 English ft., and a height of 65¾ ft., and consists of 6 arches of unequal size, the breadth of the largest, through which the Gardon usually flows, being 82¼ ft. The second, or middle tier, is 846 ft. in length, and 62¾ ft. in height: it consists of 11 arches, generally smaller than those of the first tier, but like them of unequal size. The third or upper tier, 870 ft. in length, and 23½ ft. in height, has 35 arches, which of course are much smaller than those of the other tiers, being respectively only 13½ ft. in width. The entire height of the structure is 188 ft.; its width or thickness, which is 19¼ ft. at its base, diminishes as it ascends. On its summit is the watercourse, 4½ ft. in depth and 4 ft. in breadth, and through it a person may now pass with ease from one end of the structure to the other. About the middle of last century, a carriage road was built up against the bridge as high as the base of the second tier of arches. The *Pont du Gard* is in the Tuscan style; it is very little ornamented, but is a highly picturesque object. With singular good fortune it escaped dilapidation during the dark ages; and the greatest injury it experienced was in 1600, from the Duke de Rohan, who broke away a portion of the second tier of arches to facilitate the passage of his artillery; but the breach was afterwards repaired at the expense of the states of Languedoc.

Nimes is a bishop's see, the seat of a royal court for the déps. Gard, Lozère, and Vaucluse, courts of primary jurisdiction and commerce, a chamber of commerce, *conseil de prud'hommes*, a university academy, and the imperial academy of Gard. It has schools of drawing and chemistry, as applied to the arts, societies of agriculture, a Bible society, a commission of antiquities, an athenæum, an extensive public library, and a cabinet of natural history.

Nimes is further distinguished by its manufacturing industry. It is one of the principal seats of the silk manufacture of France; ranking, in this respect, immediately after Lyons and St. Etienne. Its manufactures are principally silk hosiery and shawls, and silk stuffs mixed with cotton, linen, and woollen. There are altogether between 7,000 and 8,000 looms at work in Nimes, many of which are Jacquard looms. All the weavers work with their families at their own homes, there being no large factories except for dyeing, or for printing silk stuffs. But though the silk manufactures of Nimes be extensive, the goods produced are not much esteemed by the upper and middle classes, being mostly mere imitations of those of Lyons, and of inferior quality. From this and other causes the export trade of Nimes is small; its industry is not progressive, and its pop. often experience distressing *crises*. Besides silks, Nimes has manufactures of cotton goods, gloves, leather, brandy, and vinegar, and a good deal of trade in wine, essences, drugs, and colonial produce. It is also the principal entrepôt for the raw silk produced in the S. of France, of which material almost all its own silk manufactures are made.

Nemausus is supposed to have been founded by a colony of Phocians; it was subjugated by the Romans, *anno* 121 B.C. In the middle ages it belonged successively to its own viscounts, the counts of Thoulouse, and the kings of Aragon, by one of whom it was ceded to Louis IX., in 1258. Nimes has given birth to many distinguished persons, among whom may be specified Count de Gebelin, author of the 'Monde Primitif,' and M. Guizot, the statesman and author.

NINEVEH, a great and famous city of the ancient world, the cap. of the Assyrian empire, is supposed to have stood on the E. bank of the Tigris, opposite to the modern city of Mosul. It was till lately supposed that its site was identical with that of the village of Nunia, or Nebbi Yunus, containing the 'tomb of Jonah,' about 3 m. from the river, upon and surrounded by vast heaps of ruins; lat. 36° 20′ 17″ N., long. 43° 10′ 17″ E. But other vast mounds of ruins exist at Khorsabad, about 10 m. NNE. from Nunia, and at Nimroud, about 18 m. S., in the angle formed by the junction of the greater Zab with the Tigris. It is not possible to say which of these mounds may really represent the site of the city. They appear, in fact, to consist of the ruins of palaces, or other great public buildings; and may either have been within or beyond the city walls, or have been in different, though contiguous, cities. It seems against all probability to suppose that Nimroud and Khorsabad were included in the same city.

Herodotus (i. 185) and other profane writers ascribe its foundation to Ninus, son of Belus, and first monarch of the Assyrian empire. But, according to the Bible (Gen. x. 11), 'Asshur (the grandson of Cush) went forth out of the land of Shinar, and builded Nineveh.' Its history is lost in the obscurity of succeeding ages; but it was, no doubt, a very large city 9 or 10 centuries before the Christian era, for at that period Jonah described it as 'an exceeding great city of three days' journey.' (iii. 3.) Strabo says (l. xvi.) that it was much larger even than Babylon; the circuit of which he estimated at 385 stadia; and, according to Diodorus Siculus (l. ii.), it was of an oblong shape, 150 stadia in length, and 90 in breadth; that is, above 54 m. in circuit. Very little dependence can, however, be placed on these statements; and it is, at the same time,

Digitized by Google

admitted that the walls included a large extent of gardens and pasture grounds. The description of its walls, given by Diodorus, is too obviously exaggerated to require any notice. The prophet Jonah says that Nineveh 'had more than six score thousand persons that could not distinguish between their right hand and their left.' (Jonah iv. 11.) This expression, the import of which is by no means clear, has been generally understood to refer to children; and, taking it in this sense, and including under the term children the younger persons under nine years of age, they might be taken at about one-fourth part of the pop., which, consequently, would be 480,000. But if we suppose, as some critics have done, that the children referred to by the prophet could not well exceed five years of age, they might be taken at between one-sixth and one-seventh part of the pop., which would, consequently, amount to from 720,000 to 840,000. It is plain, however, that these statements are far too vague to be entitled to any considerable weight.

Nineveh was the residence of the Assyrian kings, and a city of such commercial importance, that Nahum apostrophises her: 'Thou hast multiplied thy merchants above the stars of heaven.' (iii. 16.) She was besieged and taken by Arbaces the Mede in the 8th century B. C., but it appears to have been regarded as the cap. of the Assyrian empire down to *anno* 612 B. C., nearly 3 centuries after Jonah's prophecy of her destruction, when she fell, after a protracted siege, into the hands of Ahasuerus, or Cyaxares, king of Media, who took 'spoil of silver and gold, and none end of the store and glory out of all the pleasant furniture,' making her 'empty, and void, and waste.' (Nahum ii. 9, 10.) The spoil was taken to Ecbatana, the citizens were dispersed in villages, and the Assyrian empire, which had for centuries been the glory of the Eastern world, gave way to that of the Medes and Persians. It seems certain, however, either that the city had not been wholly destroyed, or, which is most probable, that a new and inferior city had, at a subsequent period, grown out of the ruins of the more ancient city. The latter, no doubt, is that referred to by Tacitus (Annal. xii. 13) and Ammianus Marcellinus (xxiii. 20). The supposed ruins, or mounds opposite to Mosul, have the appearance of low, abrupt hills; and have been long known to contain bricks, entire as well as in fragments, and pieces of gypsum, with inscriptions in the wedge-formed character, closely resembling those of Babylon.

But within the last ten years they have been partially explored by M. Botta, French consul at Mosul, and by Mr. Layard, an English gentleman; and their investigations, especially those of the latter at Nimroud, have been in the highest degree interesting. What was supposed to be a shapeless mass of earth and rubbish has been found to include the ruins of a royal palace in nearly as good preservation as the remains of Pompeii. It appears to have been of a gigantic size, and had been enriched with a vast variety of sculptures, including winged human-headed lions and bulls; statues of monarchs, generals, and priests; and other pieces in *basso rilievo*, some representing warlike achievements, and others, scenes of peaceful life, executed with infinite spirit and on a grand scale. This extraordinary disinterment of a royal residence buried 2,500 years ago, while it illustrates some of the most important portions of sacred and profane history, shows that the reports that have come down to us of the wealth, greatness, and magnificence of the Assyrian monarchs have not been in any degree exaggerated. (See the striking description of Ezekiel, xxx. 3, &c.) The walls and portions of the statues are covered with cuneiform inscriptions, and should means be found of interpreting them, they will disclose a part at least of the true history of the empire. The palace at Nimroud appears to have been destroyed by fire; and the remains found in it have obviously belonged to different epochs, the most remote extending as far back, perhaps, as the 14th or 15th century B. C. Some of the most interesting of the Nineveh sculptures are now, by a strange fate, lodged in the British Museum. (Nineveh and its Remains, by Layard, 2 vols. 8vo.)

NING-PO, a city of China of the first rank, prov. Che-Keang, at the confluence of the rivers Kin and Yaou, near their mouth in the harbour of Chusan, 46 m. E. by S. Hang-tcheou, and about 180 m. SE. Nankin; lat. 29° 55′ N., long. 120° 17′ E. Pop. estimated at from 200,000 to 400,000. It is surrounded by walls and bastions, now in ruins, and is entered by 5 gates: the streets are broad and long, and the shops surpass those of Canton in elegance and splendour. It is intersected by numerous canals: a floating bridge across the inlet; and there are several pagodas, government warehouses, and other public buildings. The suburbs are flat, presenting rich fields and rice-gardens; but at the back, skirting the sea-shore, are dark-looking barren hills. Ning-po may be considered the third or fourth emporium of the Chinese empire; and the trade to the N. and S. districts of China, as well as to Siam, is of much importance. In the neighbourhood are very extensive salt works, and salt is exported in considerable quantities. The town is accessible by vessels of 300 tons, but large ships unload at Chinhae, a fortified town at the entrance of the inlet.

The English formerly traded to Ning-po. They were compelled, however, in the 17th century, to confine themselves to Macao, at the same time that similar restrictions were imposed on the Portuguese. But the city has been again opened to the English under the treaty of 1842. Hitherto the trade with it has been unimportant.

NIORT, a town of France, dép. Deux-Sèvres, of which it is the cap., on the Sèvre-Niortaise, 34 m. ENE. La Rochelle, and 43 m. WSW. Poitiers, on the railway from Paris to La Rochelle. Pop. 20,831 in 1861. The town is pleasantly situated on the declivities of two hills, and is surrounded by planted promenades. It was formerly ill-built, but has been greatly improved since the Revolution, many new and good streets having been constructed on the site of the ancient fortifications. The castle of Niort, which has been long converted into a prison, was the birthplace of Mad. de Maintenon. The town has two good parish churches, one of which was built by the English, two hospitals, some good barracks, public baths and public halls, a handsome arcade, a theatre, a public library with 20,000 vols., including some rare MSS.; and a botanic garden, having attached to it a large horticultural school. It is the seat of tribunals of primary jurisdiction and commerce, an imperial athenæum, a council *des prud'hommes*, a society of agriculture, and a communal college. It has manufactures of leather, gloves, shoes, woollen stuffs, wooden and horn articles; and is an entrepôt for the wines of the Gironde, and for timber, wool, hides, and cattle. It is also celebrated for its confectionery.

NIPHON. See JAPAN.

NISHAPOOR, a town of Persia, in Khorassan, cap. district of its own name, 46 m. W. by S. Meshed, lat. 58° 55′ N., long. 36° 8′ E. Pop. estimated at 8,000. The town has a poor appear-

Digitized by Google

ance, being confined within a mud wall and ditch, without either minarets or domes, the only building that appears above the wall being a shapeless mosque. The circuit of the present wall does not exceed 4,000 paces, and the greater part of the enclosed area is covered with ruins. The houses now inhabited, of which there are about 1,200, are meanly built, chiefly of mud. A tolerably large bazaar is well filled with goods, and provisions are alleged to be cheap and of good quality.

Nishapoor has few manufactures, and cannot boast of a single branch of foreign trade, except that of turquoises, from which, owing to the exactions of the government, and clumsy mode of working, it derives little benefit. The turquoise mines (from which exclusively are derived our supplies of this valuable gem) are about eight or nine in number, principally situated in a hill about 40 m. WSW. Nishapoor: of these, however, some have been abandoned, and others are so imperfectly wrought, as scarcely to pay the miners' expenses. The gems are usually found in a reddish brown-rock, but occasionally also in a firm quartzose rock of a whitish grey colour, abounding with veins of specular iron. The produce of the mines would be very great under proper management; but nothing can be more inartificial than the process now adopted by the peasant-farmers, no skill or ingenuity being exerted, and no sort of contrivance used to lessen labour, or economise time and material. This defective management is mainly attributable to the wretched government, and the consequent insecurity of property from the oppressions of the local authorities. The mines are rented from the crown for about 2,000 tomans annually, and wrought almost exclusively by the inhab. of the surrounding villages. The produce is either sold to merchants resorting thither, or sent for sale to Meshed; but the miners practise every possible deception on purchasers; and the gems cannot be procured at a rate which would yield any considerable profit on a sale in Europe. Iron and rock-salt are also wrought within the district. Agriculture is little understood: the soil is tilled only once in 3 or 4 years, the ground being left fallow during the intervening time: one-fifth of the produce is claimed as the property of the shah.

Nishapoor lays claim to high antiquity. It is said to have been destroyed by Alexander the Great, and rebuilt by Shapoor: afterwards, during the Seljuk dynasty, it was one of the four royal cities of Khorassan; but in 1269 it was destroyed by the Tartars, who massacred most part of its inhab. It was again pillaged by Jhengiz-khan; and more recently, in 1749, by Nadir Shah, from whose ravages it has never recovered.

NIVELLES (Flem. *Nyvel*), a town of Belgium, prov. S. Brabant, cap. arrond., on the Thienne, 17 m. S. Brussels, on the railway from Brussels to Charleroi. Pop. 8,839 in 1860. The town is said to have had, in the 16th century, a pop. of 30,000; and it is still half a league in circuit, exclusive of its suburbs. It is not well built; but it has a remarkable church, in which are two finely carved pulpits, and on the tower is a colossal statue, called Jean de Nivelles, which strikes the hours. It is the seat of a court of primary jurisdiction, and the residence of a receiver of taxes; with manufactures of woollen stuffs, coarse lace, cotton and linen cloths, hats, paper, and oil, and sends two deputies to the states of the prov. It originated from a remarkable Benedictine convent, founded by St. Gertrude in 645, the abbesses of which enjoyed the title of princesses of Nivelles.

NOCERA DEI PAGANI (an. *Nuceria Alfaterna*), a town of South Italy, prov. Salerno, on the Sarno, 8 m. NW. Salerno. Pop. 15,075 in 1862. The walls and citadel of the ancient city are on a hill above the present town, which consists of detached groups of houses, interspersed with trees and gardens. Nocera is the see of a bishop; it has some fine cavalry barracks, several public schools, and manufactures of linen and other fabrics. Nuceria was of great antiquity, and is said to have been founded by the Pelasgian inhabs. of Italy. It was sacked and burned by Hannibal in the 2d Punic War. It is supposed to have derived its surname of Pagani from a colony of Saracens, settled in it by the emperor Frederick II.

NOGENT-LE-ROTROU, a town of France, dép. Eure-et-Loire, cap. arrond., on the Huisne, 32 m. WSW. Chartres. Pop. 7,105 in 1861. The town stands at the foot of a mount, on which is the château, formerly the residence of the virtuous minister of Henry. IV., the famous Maximilian de Bethune, duc de Sully; to whose memory a monument has been erected in the town.

NOIRMOUTIERS, an island off the W. coast of France, dép. Vendée, of which it forms a canton; in about lat. 47° N., long 2° 13′ 45″ W.; separated from the main land by a channel about 1 m. in breadth, but which at ebb tide may be passed by horses and vehicles. Area of the island about 70 sq. m. It is in no part much above, and in many parts below, high water mark, being protected against inundations on the W. by a range of natural sand-hills or *dunes*, and on the S. by artificial embankments. A portion of the surface is very fertile, and corn and beans are grown for exportation; a little wine is also grown, but the chief product of the island is salt, from extensive marshes and salt-pans. The town of Noirmoutiers, with 6,248 inhabitants in 1861, is on the E. side of the island. It is tolerably well built and paved; defended by an old castle founded in 830, and several adjacent batteries; and has a harbour capable of receiving vessels of from 50 to 60 tons.

NOLA, a town of South Italy, prov. Caserta, in a wide and fertile plain, the *Campania Felix* of the ancients; 14 m. ENE. Naples. Pop. 12,964 in 1862. Though ill built and dirty, it has many churches and convents, a hospital, a college, and public seminary, large cavalry barracks, an old palace of the counts of Nola, and a good market-place.

In antiquity Nola was one of the most considerable cities of Magna Græcia. It is said by Pliny (lib. iii. cap. 5), and by Silius Italicus, to have been founded by a colony of Chalcidians:—

'Hinc ad Chalcidicam transfert citus agmina Nolam.
Campo Nola sedet, crebris circumdata in orbem
Turribus, et celso facilem tutatur adiri
Planitiem vallo.' Punica, lib. xii. v. 161.

But Velleius Paterculus (lib. i. cap. 7) states that Nola was founded, along with Capua, by the Tuscans; and the many fine Etruscan vases that have been found here seem to corroborate this statement. It was besieged by Hannibal soon after the battle of Cannæ; but Marcellus, who had thrown himself into the town, having made an unexpected assault upon the Carthaginian army, Hannibal withdrew from the siege. It is, however, principally celebrated in ancient history from its having been the place where Marcus Agrippa, the faithful friend and successful general of Augustus, breathed his last, *anno* 12 B. C.; and where Augustus himself expired, A. D. 14, in the 75th year of his age. But, with the exception of its vases, it has now but few remains of antiquity. In the days of its prosperity it had two marble amphitheatres; of which, however, nothing now remains but the brick walls, the marble having been taken away to be employed in the construction of modern edifices.

Digitized by Google

The famous Giordano Bruno was a native of Nola, where he was born about the middle of the 16th century. He appears, at a very early period, to have become dissatisfied alike with the prevailing systems of philosophy and religion, and attempted to innovate in both. In 1583 he came to London, where he published, in 1584, his most celebrated work, 'Spaccio della Bestia Trionfante,' dedicated to Sir Philip Sydney, of which there is a very flimsy notice in the 389th number of the 'Spectator.' Having returned to the Continent, he resided some time in Germany; but, being anxious to revisit his native country, he arrived at Venice in 1598. Here he was arrested and thrown into prison, on the convenient charge of heresy and atheism. From Venice he was transferred to Rome; where, sentence having been pronounced against him, he was committed to the flames on the 17th of Feb. 1600. An elaborate estimate of the philosophy of this victim of the implacable hatred of the Inquisition may be found in the 'Historia Critica Philosophiæ,' of Brucker (vol. v. cap. 2), and in Enfield's compendium of the same work.

NORCIA, a town of Central Italy, prov. Perugia, in a high valley near the source of the Nar, and 17½ m. ENE. Spoleto. Pop. 9,795 in 1862. The town has a brisk trade in wine, oil, truffles, turnips, and other rural produce. It is identical with the ancient *Nursia*, noted for the coldness of its climate:—

'Qui Tibrim, Fadarimque bibunt; quos frigida misit Nursia.' Æneid, vii. 715.

NORD (DEP. DU), or Department of the North, so called from its being the most N. dép. of France, lying principally between the 50th and 51st degs. of N. lat., and the 2nd and 4th of E. long., having N. and E. the North Sea and Belgium, and S. and W. the déps. Aisne and Pas-de-Calais. Shape very irregular; length NW. to SE. 115 m., by a breadth varying from 4 to nearly 40 m. Area 567,863 hectares. Pop. 1,303,380 in 1861. Surface almost an uninterrupted plain, the highest hill being no more than 360 ft. above the sea. The shore is bordered with sandy downs (*dunes*), as in Belgium and Holland. The Aa and Yser water the N., the Lys and Scheldt the central, and the Sanubre the S. parts of the dép. The arrond. of Dunkirk (*Dunkerque*) has a good deal of marsh land, called the *Wateringues* and the *Moëres*; but it has been mostly drained, and rendered cultivable. The soil, except along the coast, is generally very fertile. The arable lands are estimated to comprise 359,570 hectares, meadow lands, 95,832 hectares, orchards, 16,334 hectares, and woods, 35,827, hectares. This dép is among the best cultivated in France. The properties, as elsewhere throughout that country, are, in general, small; but it has, notwithstanding, more large properties than most other déps. The largest farms are round Douai; the smallest generally about Lille. In the wooded tracts they run mostly from 13 to 22 hectares; but in the marshy region, called the *Wateringues*, they vary up to between 60 and 70 hectares. Leases are seldom for more than 9 years, except in the arrond. of Avesnes, where they are frequently from 18 to 27 years, or even longer. On the large farms horses are used for the plough; but spade husbandry is common on all the smaller holdings, and nearly universal on the lands appropriated to flax, hops, tobacco, or potatoes. Fallows are rare, and the cultivators are not here, as in most parts of France, so addicted to routine practices as to reject all new and improved methods of culture. All kinds of corn are cultivated, principally wheat and oats, but from the density of the pop. but little more corn is usually grown than is required for the home demand. Kitchen vegetables are good and plentiful; and beet root, oleaginous grains, hops, chicory, flax, hemp, wood, and fruits are also extensively raised. The pastures are very good, especially on the Sambre and in the N. According to the official tables, there are about 214,000 black cattle, and 193,000 sheep in the dép. The cows are of the fine Flemish breed, and it is estimated that they supply 7,000,000 kilogr. butter, and 1,500,000 kilogr. cheese a year. The annual produce of wool is about 745,000 kilogr.; a good deal is of very fair quality, the sheep being partly Merinos, and partly of the long and fine woolled Flanders breed. The inhabs. of the coast are actively employed in the herring fishery, and at Dunkirk and Gravelines many vessels are fitted out for the cod and whale fisheries.

Dunkirk is the centre of the marit. trade; but many vessels leave Gravelines with cargoes for the English market of from 500,000 to 600,000 eggs, produced in this and the neighbouring déps. Iron, marble, and building stone are found here; but the principal mineral product is coal, of which about 6,000,000 quintals a year are raised. Manufactures highly important. Nearly half the beet-root sugar produced in France is raised in this dép. Lille is one of the chief seats of the French cotton trade, which also occupies the pop. of Roubaix and Turcoing.

Lace and linen fabrics at Valenciennes; carpets, stuffs of hemp, cordage, arms, at Maubeuge and Cambrai; hardware, cutlery, glass and earthenware, hats, paper, soap, chemical products, barrels, tiles, and bricks, are among the other chief manufactures. A great many distilleries, breweries, sugar and salt refineries, dyeing and bleaching establishments and tanneries, are spread over the dép. No portion of France has its commerce so much facilitated by navigable rivers, canals, railways, and good roads. The dép. is divided into 7 arronds.; chief towns, Lille (Lisle), the capital, Avesnes, Cambrai, Douai, Dunkirk, Hazebrouke, and Valenciennes. This dép. was annexed to the French crown by Louis XIV.

NORDHAUSEN, a town of Prussia, gov. Erfurt, cap. circ., on the Zorge, 49 m. W. Halle. Pop. 17,686 in 1861. The town is surrounded with old walls flanked with towers, and is generally built in an antiquated style. It has several churches, in one of which are two paintings by L. Cranach; 3 hospitals, a gymnasium, an orphan asylum, and a theatre, and is the seat of a circ. council, a board of taxation, and judicial courts for the town and circ. It is, for its extent, one of the most flourishing commercial towns in the Prussian dom., having numerous distilleries, the refuse of which support great numbers of hogs and cattle. Woollen cloth, sealing wax, vitriol, soap, mineral waters, and cream of tartar are made at Nordhausen, which is further noted for its peculiar manufacture of fuming sulphuric acid. It has also numerous oil-mills, some marble works, and a considerable trade in corn, produced in its vicinity. It was the native-place of the celebrated philologist Wolf.

NORDKOPING (Swed. *Norkoping*), a town and port of Sweden, lan. Linköpen, on the Motala, near its mouth in the Baltic, 85 m. SW. Stockholm, with which it is connected by railway. Pop. 21,679 in 1861. After Stockholm, it covers more ground than any other Swedish town, but it has no public building worthy of notice. It has straight and broad streets, and is well situated for trade, having a commodious quay, close to which vessels can lie. It has several churches, a synagogue, public school, house of correction, and savings' bank, and manufactures of brass and

Digitized by Google

hardware goods, linen, cotton, and coarse woollen fabrics, gloves, starch, paper, and leather, and several sugar refineries. A profitable salmon fishery is also carried on in the river.

NORDLINGEN, a town of Bavaria, circ. Middle Franconia: on the Eger, 48 m. SW. Nuremberg, on the railway from Nuremberg to Augsburg. Pop. 6,412 in 1861. The town is surrounded with old bastioned ramparts. The cathedral, a handsome Gothic edifice, has some curious monuments and paintings, and a tower 345 ft. in height. The town-hall is ornamented with fresco paintings of the battle of Nordlingen, in 1634; in which, after an obstinate and doubtful conflict, the Austrians and Bavarians, under the Archduke Ferdinand, defeated the Swedes and their allies, under the famous Bernard, duke of Weimar. The town has flourishing carpet factories, and a considerable trade in feathers, geese, and hogs.

NORFOLK, a marit. co. of England on its E. coast, having N. and E. the German Ocean, S. Suffolk, and W. Cambridge, a point of Lincoln, and the inlet of the sea called the Wash. It is of a circular shape, and contains 1,295,360 acres, of which about 1,200,000 are supposed to be arable, meadow, and pasture. Surface generally flat, and where most diversified merely undulating. Soil various: in the W. parts of the co., contiguous to Cambridge, and the bottom of the Wash, there is a considerable tract of marsh land included within the Great Level of the Fens: and there is also some marsh land in the SE. corner of the co. contiguous to Yarmouth. But, with these exceptions, the rest of the co. consists principally of a light sandy loam, especially suitable for the turnip and barley husbandry. Climate dry and early; but in spring the E. winds are often very severe. Few cos. in the empire have been so much improved as this. Little more than a century ago, the greater portion of it consisted of wastes, commons, sheep-walks, and warrens of little or no value. But, through the judicious application of marl, which is found in the greatest abundance in all parts of the co., and the extension of the turnip husbandry, introduced by Lord Viscount Townshend in the reign of George II., followed up by the introduction of the drill husbandry, and an improved rotation of crops, it is now, perhaps, the best farmed co. in England, and is a striking example of what may be accomplished by intelligence, perseverance, and industry. The usual rotation in the turnip land is, 1st, turnips; 2nd, barley; 3rd, clover, or clover and rye grass; and, 4th, wheat. Turnips form the basis of the system, and are said, with marl, to 'have made the co.' On some estates no oats are allowed to be raised, and barley is, in all respects, the leading corn crop. Tenants are strictly prohibited from taking two white crops in succession, and the land is kept remarkably clean, and is not injured by overcropping. Ploughing is wholly executed, as in Scotland, by ploughs drawn by 2 horses or 2 oxen. The grazing husbandry of Norfolk is very inferior to the arable, though it has been latterly a good deal improved. Great numbers of galloways, and other Scotch cattle, are purchased at the great fairs in the co. to be turnip fed, and otherwise fattened for the market of the metropolis. The stock of sheep is very large, amounting to between 700,000 and 800,000 head. Vast quantities of turkeys are raised in this co. and Suffolk, which furnish the greater part of those supplied to London, especially at Christmas. Estates of all sizes, from 40,000*l.* a year downwards. Farms mostly large; and, in fact, the great improvements of which Norfolk has been the theatre never could have been effected by small farmers. Leases vary from 7 to 14, and in a few instances to 21 years. Farm buildings generally good; barns very large. Minerals, with the exception of marl, of no importance. The woollen manufacture, especially the worsted branch, has been long extensively carried on in this co., especially at Norwich, where various descriptions of shawls, crapes, and silks are also manufactured. (See NORWICH.) But owing to the superior facilities for the successful prosecution of manufacturing industry enjoyed by Bradford, Paisley, and other towns in the N. engaged in the same departments, the manufactures of Norfolk are rather on the decline. Principal rivers, Great and Little Ouse, Nen, Waveney, Yare, and Wensume. A navigable communication, admitting vessels drawing 10 ft. water, has been effected between Norwich and Lowestoff. (See LOWESTOFF.) Norfolk has no fewer than 33 hundreds and 713 parishes. Principal towns, Norwich, Yarmouth, and King's Lynn. It sends 12 mems. to the H. of C.: viz. 4 for the co., 2 for the city of Norwich, and 2 each for the bors. of King's Lynn, Thetford, and Yarmouth. Registered electors for the co. 14,473 in 1865, being 7,939 for East Norfolk, and 6,534 for West Norfolk. At the census of 1861, the co. had 96,672 inhabited houses, and 434,798 inhabitants, while in 1841 Norfolk had 85,903 inhabited houses, and 412,664 inhabs.

NORFOLK, a borough town and port of entry of the U. States, Virginia, co. Norfolk, on Elizabeth River, 8 m. from Hampton Roads, in Chesapeake Bay, and 90 m. SE. Richmond. Pop. 14,600 in 1860. The town stands on low and somewhat marshy ground; its principal streets are well paved and clean, but the others are generally irregular and inconvenient; and neither the public nor private buildings can boast of much elegance, though of late years it has been a good deal improved. It has places of worship for various sects, a marine hospital, an orphan asylum, a lyceum, Lancastrian school, and theatre. The harbour is deep, capacious, secure, and easy of access; its entrance, rather more than 1 m. in width, is defended by three strong forts. At Gosport, in the township of Portsmouth, near Norfolk, is one of the most important navy-yards in the U. States, in which is a noble dry dock of hewn granite, constructed at a cost of 974,356 dolls.

NORMANDY, one of the provs. of France under the old regime, now distributed among the déps. of Seine Inférieure, Eure, Orne, Calvados, and La Manche.

NORTHALLERTON, a parl. borough, market town, and par. of England, in the liberty of Allertonshire, N. riding co. York, on a small trib. of the Whisk, 13½ m. SSE. Darlington, and 31 m. NW. York, on the Great Northern railway. Pop. of borough 4,755 in 1861. Area of parliamentary borough, which comprises the township of Northallerton, Romanby, and Brompton, 9,340 acres. The town stands on level ground, along the great N. road from London to Edinburgh. It is wide, well paved, and lighted with gas: a market-house stands near the centre of the town, and at its N. extremity is a fine open space, in which are the church and churchyard. The former is a large cruciform structure, of considerable beauty, with a square tower at its W. end: the living is a vicarage, in the gift of the dean and chapter of Durham. A grammar-school has been founded here under the same patronage, and there is a large national school for children of both sexes. There is also a place of worship for Wesleyan Methodists, with an attached Sunday school. The register office for the N. riding of the co. was built here in 1736; and there is a court-house, in which the general co. sessions of

Digitized by Google

the peace are held. A gaol has also been built, within the present century, on the plan of Howard. The railway uniting York and Newcastle passes close to the town on the W. It has very large weekly cattle and corn markets on Wednesdays, and large fairs for horses, cattle, sheep, and cheese, Feb. 14, May 5, Sept. 5, Oct. 3, and 2nd Wednesday in Oct.

Northallerton sent 2 mems. to the H. of C. from the 15th Charles I. down to the passing of the Reform Act, which deprived it of one of its mems. The elective franchise was formerly attached to about 210 burgage-houses, mixed up and conjoined with the other buildings from one end of the town to the other. The electoral limits were enlarged as above mentioned, by the Boundary Act, and in 1865 there were 438 reg. electors.

At a short distance from Northallerton is Standard Hill, celebrated as having been the scene, in 1138, of a sanguinary conflict between the Scotch, under David I., and the English, under the Earls of Abbemarle and Ferrers. It was called the battle of the Standard, from the circumstance of the victory of the English being attributed to their possessing a standard whence were displayed the banners of St. Peter of York, St. John of Beverley, and St. Wilfred of Ripon, the whole being surmounted by a consecrated host; but the true cause of the defeat of the Scotch was their consternation at the supposed death of their king.

NORTHAMPTON, a central co. of England, having at its N. extremity the co. of Lincoln: on its E. and SE. side, Cambridge, Huntingdon, Bedford, and Buckingham; S. Oxford; and W. and NW. Warwick, Leicester, and Rutland. It stretches NE. and SW. from Banbury to near Crowland, a distance of 66 m. Area 630,358 acres, of which about 580,000 are supposed to be arable, meadow, and pasture. Surface beautifully diversified with gently rising hills, fine valleys, and extensive woods: it is traversed nearly in its whole extent by the Nen, which rises near Daventry. Though of various qualities the soil is in general very fertile, and is, in many parts, strong and well adapted for the culture of wheat and beans, which are the principal crops. The climate is mild and salubrious, and there are more gentlemen's seats in this than in most other counties. Agriculture, though still capable of material improvement, is, on the whole, in a comparatively advanced state. About half the co. is in grass; and great numbers of heavy horses, and of cattle, mostly short-horns, and sheep, are bred. Estates are generally large; but there are few large farms; and the circumstance of their being let only from year to year tends to perpetuate the routine practices that keep their ground in this and other counties. Farm-houses and offices are mostly inferior, and inconveniently placed; and this is also true of cottages. This is one of the cos. in which there is a great waste of horse labour, 5 horses being usually employed to do the same work that might be as well done by 2, or at most 3. The woodlands are very extensive, and a good deal of wood is used as fuel. Except limestone, which is very abundant, and slates, dug up at Collyweston, minerals are of little importance. Boots and shoes are extensively produced in the town of Northampton, and in Wellingborough and other places; but the want of coal is an all but insurmountable difficulty to the progress of manufacturing industry. Exclusive of the Nen, the Ouse and Welland have their sources in Northamptonshire. Principal towns, Northampton, Peterborough, and Wellingborough. This co. is divided into 20 hunds. and 306 pars., and sends 8 mems. to the H. of C., viz. 4 for the co., 2 for Northampton, and 2 for Peterborough. Registered electors for the co. 9,309 in 1865, being 4,016 for the northern and 5,293 for the southern division. At the census of 1861, the co. had 48,531 inhabited houses, and 227,704 inhabitants, while, in 1841, Northamptonshire had 40,841 inhab. houses, and 199,228 inhab.

NORTHAMPTON, a parl. and mun. bor., market and manufacturing town of England, cap. of the above co., hund. Spelhoe, on the great N. road, and on the N. bank of the Nen, 29 m. SSE. Leicester, 59 m. NW. London, and 67½ m. by London and North Western railway. Pop. of bor. 32,813 in 1861. Area of parl. and mun. bor. (which comprises 4 pars.), 1,520 acres. The town, which comprises 4 principal streets, meeting in a very large open market-place, is well-built, paved, and lighted with gas: the houses in the principal street along the line of the great N. road are of stone, large, and substantial; but in the smaller streets are many inferior houses, almost entirely occupied by journeymen-shoemakers, and other workmen employed in shoemaking. The pars. of All Saints' and St. Giles's comprise the principal portion of the respectable classes of society. St. Peter's is a small par., inhabited principally by the inferior tradespeople and working classes. St. Sepulchre's is extensive, but chiefly occupied by artisans and labourers. There were formerly 7 par. churches, of which 4 still remain. That of All Saints' in the centre of the town, (rebuilt in 1680, on the site of one destroyed by fire,) is a large and handsome, though somewhat incongruous, building, with a central cupola supported by 4 Ionic columns, and a tower at its W. end, rising above an Ionic portico: a fine organ, and a full-length statue of the late Spencer Perceval, are the principal ornaments of the interior. St. Giles's, at the E. end of the town, is a large cruciform structure, partly of Norman and partly of later English architecture, with a square tower rising from the intersection of the nave and transepts. St. Peter's at the W. end of the town near the castle, erected shortly after the Norman Conquest, consists of a nave, with side aisles separated from it by piers and arches, with a square western tower, and is altogether 'a remarkably fine and curious specimen of enriched Norman.' (Rickman, p. 214.) St. Sepulchre's, an almost equally ancient edifice, built by the Knights Templar, at the N. end of the town, comprises a circular part, forming the body of the church, a square chancel with side-aisles, and a square tower surmounted by a spire at its W. end The remains of the old church of St. Gregory form a school-house; but the two others have entirely disappeared, and of the numerous religious houses existing in Northampton before the Reformation, two only, St. Thomas's and St. John's, both in the later English style, now remain, having been converted into almshouses for the aged poor. The Wesleyan Methodists, Baptists, Presbyterians, Rom. Catholics, and the Society of Friends, have their respective places of worship: the castle-hill meeting-house was, for 22 years, the scene of Dr. Doddridge's ministrations, during which period he was also master of the Presbyterian academy in this town. Attached to the various churches and chapels are numerous Sunday schools, furnishing religious instruction to between 2,000 and 3,000 children of both sexes. A central national school, serving as a model school for the co., is attended by about 400 boys and girls; a Lancastrian school, by upwards of 500 children; 2 infant schools (one of which is supported by the Wesleyan

Digitized by Google

Methodists) have 250 children: besides which, the corporation charity school, Dryden's charity school, and the girls' school in King's-well Street, provide clothing and education for 120 children of both sexes. The free grammar school, in Marefare, was founded in 1542. Among the other buildings of the town is the shire hall, on the S. side of the market square: it is of Grecian architecture, and comprises 2 large courts, and other apartments well adapted for the business of the assizes. The town hall is a fine Gothic building commenced in 1861, and completed in 1863. It is adjoining All Saints' church; and near it is the new corn exchange, built in 1850–51, containing a hall 140 ft. long. On the E. side of the town is a large co. gaol, built in 1794, on the plan of Howard. This gaol is used also, by agreement, between the co. and bor. magistrates, as a place of confinement for prisoners belonging to the bor. The theatre in Marefare, built at the beginning of the present century, is a neat building, and, though small, is sufficiently large for a town in which dramatic entertainments are little relished. Near the town is a general lunatic asylum, on a site of 24 acres, in which John Clare, the poet, spent the last thirty years of his ill-fated career. The barracks form a large enclosure on the W. side of the road leading to Leicester; and in the E. suburbs is the infirmary, a large and respectably built edifice, completed in 1793, and furnishing excellent accommodation for patients. A race-course was formed N. of the town in 1778, and the races, which take place in autumn, are invariably well attended. About ½ m. S. on the London road is an ancient cross, one of those erected at the halting-places of the funeral of Queen Eleanor, on its passage from Hardeby, in Lincolnshire, to Westminster Abbey.

The principal manufacture of the town is that of boots and shoes, and a large proportion of the lower orders, men, women, and children, are employed in this craft, which has thriven and increased during the last 50 years, without being affected by the various changes which have occurred within that period. These shoes are sent in large quantities to London, and furnish the chief supply of the shops that deal in cheap, ready-made shoes: they are, also, extensively exported. Leather currying and saddlery are carried on; but the stocking and lace trades, once very considerable, have greatly declined since the introduction of machinery at Leicester and Nottingham. There are also several foundries, and the manufacture of light brass and iron work is prosecuted on rather an extensive scale. Northampton was formerly the seat of a large posting business, which the opening of railways has gone far to annihilate. She is now united by railway with Peterborough and the lines leading to Lincolnshire and York on the one hand, and with the Blisworth station of the Great North Western railway on the other. The latter brings her within little more than two hours' distance of London, and the facility of intercourse thence arising has more than indemnified her the loss of the posting business. The Nen, also, and the numerous canals uniting with that river, give to Northampton the advantage of a water communication with the German Ocean, London, Liverpool, Manchester, and Bristol.

Northampton is a bor. by prescription, and has received several royal charters, the last being granted in the 36th George III. By the Mun. Reform Act it has been divided into 3 wards, and is governed by a mayor, 5 aldermen, and 18 councillors; having also a commission of the peace under a recorder, and a court of record for civil suits. The assizes for the co. are held here in spring and summer, and quarter sessions in Jan., April, July, and Oct. The bor. has sent two mems. to the H. of C. since the reign of Edward I.; the right of voting, previously to the Reform Act, being in inhabitant-householders occupying a distinct dwelling for six months previously to the election, and not having received alms for twelve months. The electoral limits were left untouched by the Boundary Act, and in 1865 had 2,717 reg. electors. Northampton is likewise the principal polling-place and election town for the S. div. of the co. A large cattle market is held every Saturday, and there are smaller markets on two other days. Extensive horse and cattle fairs, attended by jobbers from all parts of England, Feb. 20, April 6, May 4, and Aug. 5.

After the Norman Conquest *North-Hamtune*, which, according to the Domesday Survey, had then only 40 burgesses, was given by William I. to Simon St. Liz, who built a castle here (now marked only by an earth-mound, on the W. side of the present town). Numerous synods and parliaments met here during the succeeding reigns, and, at the beginning of the 13th century, Northampton was considered of sufficient importance to have a mint. In the reign of Henry III. an attempt was made to establish a university here, consisting of emigrant students from Oxford and Cambridge; but, though the scheme was at first sanctioned by the king, a mandate was afterwards issued to compel the students to return to their old seminaries, and to forbid the continuance of the establishment. In the wars of the Roses, its neighbourhood was the scene of a great battle (fought 10th July, 1460), between Henry VI. and the Earl of March (afterwards Edward IV.) in which the former was defeated and taken prisoner. In 1642 the town was seized by Lord Brooke, who fortified it for the parliament. In 1663, Northampton suffered greatly from a flood, and in 1675 was nearly destroyed by fire, the loss of property being estimated at 150,000*l*. To this calamity, however, may be attributed the increased width and regular arrangement of the streets, for which it is remarkable above most other provincial towns.

Northampton has been long celebrated in the annals of life insurance from the circumstance of Dr. Price having founded his famous table of the rate of mortality on the register of the deaths in the parish of All Saints in this town. But this table was far from being accurate at the time when it was framed, and is now very wide of the mark. And though it had represented the mortality in the parish of All Saints quite correctly, that was much too narrow a basis to be taken for a representation of the average mortality of England.

NORTHFLEET. See GRAVESEND.

NORTHUMBERLAND, a marit. co. of England, being the most northerly of the kingdom, having N. a small detached portion of Durham, by which it is separated from Scotland, E. the German Ocean, S. Durham, and W. Cumberland, and the cos. of Roxburgh and Berwick, in Scotland. Area, 1,249,299 acres, of which about 800,000 are supposed to be arable, meadow, and pasture. It exhibits every variety of surface and soil. It is divided from Scotland and Cumberland by the Cheviot Hills and a portion of the Pennine, or great central range of mountains, which stretch out into extensive moors, and cover a large portion of the W. parts of the co. with their ramifications. There are, however, very extensive tracts of low land along the coast, and in the vales of

Digitized by Google

the Coquet, Tyne, and other rivers, the soil of which consists, for the most part, of a strong clay loam, and is very fertile. The Cheviot Hills are mostly covered with fine verdure, affording excellent pasture for the peculiar and valuable breed of sheep, called by their name, and now so widely diffused; but the mountains and their offsets belonging to the Pennine range are mostly covered with peat earth; and are bleak, dreary, covered with heath, and interspersed with swampy morasses. The climate varies with the elevation and nature of the soil; but along the coast and in the vales it is dry and early. Northumberland is distinguished by its improvements, and is now one of the best cultivated counties of the empire. Wheat and oats are the principal corn crops; but barley, beans, and peas are, also, extensively raised. Turnips are an important crop in the coast district; they are universally drilled, and their culture is nowhere better understood. Cattle are of various breeds; but the improved shorthorns are now, perhaps, the greatest favourites. Estates of all sizes, but mostly large. Farms, also, large, and their occupiers distinguished by their superior intelligence and enterprise. Farms mostly held on leases, varying from 7 to 14 and 21 years. Farm-houses and cottages good. With the exception of those carried on at Newcastle (which see), manufactures are of little importance. Pit-coal forms the staple produce of Northumberland, and is raised and shipped in vast quantities from the Tyne, for the supply of London and other ports on the E. coast, and for exportation. The pitmen, who are a numerous and important class, receive wages varying from 15s. to 25s. a week, and are honourably distinguished among the working classes by their superior comforts and enjoyments. Their houses are generally clean, roomy, and well furnished; they live well, are but little influenced by political agitation, and are more orderly and decidedly less addicted to ardent spirits, cock-fighting, and such like demoralising sports, than they were 50 years ago. Exclusive of its coal, Northumberland has mines of lead and iron, and abundant supplies of limestone and sandstone; the quarries of the latter at Gateshead Fell supplying the 'Newcastle grindstones,' famous in most parts of the world. Principal rivers, Tyne, Coquet, Aln, Blyth, Wansbeck, and Till. Principal towns, Newcastle, Tynemouth, N. Shields, and Morpeth. It returns (including Berwick) 10 mems. to the H. of C., viz. 4 for the co., 2 each for the bors. of Berwick and Newcastle, and 1 each for Morpeth and Tynemouth. Reg. electors for the co. 8,619 in 1865, being 3,108 for the northern and 5,511 for the southern division. At the census of 1861, the co. had 55,565 inhab. houses, and 343,025 inhab.; while, in 1841, it had 48,710 inhab. houses, and 250,278 inhab.

NORTHWICH, a market town and township of England, par. of Great Budworth, hund. of its own name, co. Chester, on the Weaver, 16½ m. ENE. Chester, and 155 m. NW. London. Area of township 200 acres. Pop. 1,190 in 1861. It has an antiquated appearance, with badly paved streets. The church, which is subordinate to that of Great Budworth, is a large building, with a semicircular choir, remarkable for the curious decorations on the roof of the nave. There are places of worship, also, for Wesleyan Methodists and Independents, with attached Sunday schools. A grammar school was founded in 1558; it is handsomely endowed, and the government is vested in 12 trustees, who appoint both the masters and the free scholars. There is, also, a charity school for 12 poor children. Northwich is one of the *wiches* or salt towns of Cheshire, and vast quantities of salt are annually produced in the town and its vicinity. The salt mines are very extensive; they have been wrought since 1670; and the quantity of salt obtained from them is greater, probably, than is obtained from any other salt mines in the world. In its solid state, when dug from the mines, the salt is not sufficiently pure for use, and is sent to Frodsham and other places on the S. side the Mersey, where it is refined, by being dissolved in sea-water, and afterwards separated by evaporation and crystallisation. By far the largest quantity, however, of the salt now produced in Cheshire is obtained from the brine springs. The brine is first pumped up, principally by means of steam-engines, from very deep wells, and is collected in reservoirs, where it is sometimes saturated or strengthened by an admixture of crushed rock-salt. The business has greatly increased within the last few years, and it is estimated that above 300,000 tons are annually produced in Northwich and its vicinity. A considerable number of the inhab. are also employed in the cotton manufacture. It has every facility for water-carriage by its position on the Grand Trunk Navigation, and it is close to the Grand Junction railway. It is one of the polling-places at elections for the N. div. of Cheshire. Markets on Friday; a large cattle fair, April 10; other fairs, Aug. 2 and Dec. 6.

NORWAY (Norw. *Norge*, Germ. *Norwegen*), a country of N. Europe, forming the W. portion of the great Scandinavian peninsula, and at present united to the crown of Sweden. It extends, including Norwegian Lapland, between the 58th and 71st degs. of N. lat., and the 5th and 31st of E. long.; having E. Russian Lapland and Sweden, S. the Skaggerrack, separating it from Denmark, and W. and N. the North Sea and the Atlantic and Arctic Oceans. Its entire length, from the Naze, its most S. promontory, to the North Cape, is upwards of 1,100 m. Its breadth varies greatly: in Norrland, near its N. extremity, it may average about 50 m.; but towards the S. it is as much as 250 m. The kingdom is divided into seventeen provinces, or amts, of the following area and population, in 1850 and 1860:—

Amts	Sq. miles	Pop. in 1850	Pop. in 1860
Smaalehnens . .	1,570	73,622	84,416
Aggershuus . . .	1,898	109,432	95,961
Hedemarken . .	9,539	87,118	101,393
Christians . . .	9,441	102,730	115,149
Buskerud	4,798	83,918	90,343
Jarlsberg and Lourwig . .	858	63,070	73,223
Bradsberg . . .	5,574	72,891	76,546
Nedennes . . .	4,266	53,932	59,112
Mandal	2,046	61,918	67,870
Stavanger . . .	3,814	78,210	91,539
South Bergenhuus	6,300	116,989	104,762
North Bergenhuus	7,533	77,978	81,496
Romsdal	5,918	81,314	90,283
South Trondhjem .	7,111	89,329	96,318
North Trondhjem .	8,689	66,570	73,571
Nordlands . . .	15,087	65,512	77,587
Finmarken . . .	27,536	43,938	54,665
Total . . .	121,807	1,328,471	1,433,734

Physical Geography.—The chief physical characteristics of Norway are its *fjelds* and *fjords*; the first being lofty mountain plateaux in the interior, and the second deep indentations or arms of the sea all round the coast. Nearly the whole of the country is covered with mountains. The main chain, called the Kiölen (or keel), forms the line of separation between Norway and Sweden, as far S. as lat. 63°; but thenceforward it tends to the SW., under the names of Dovrefjeld, and Langefjeld, forming the watershed between the rivers

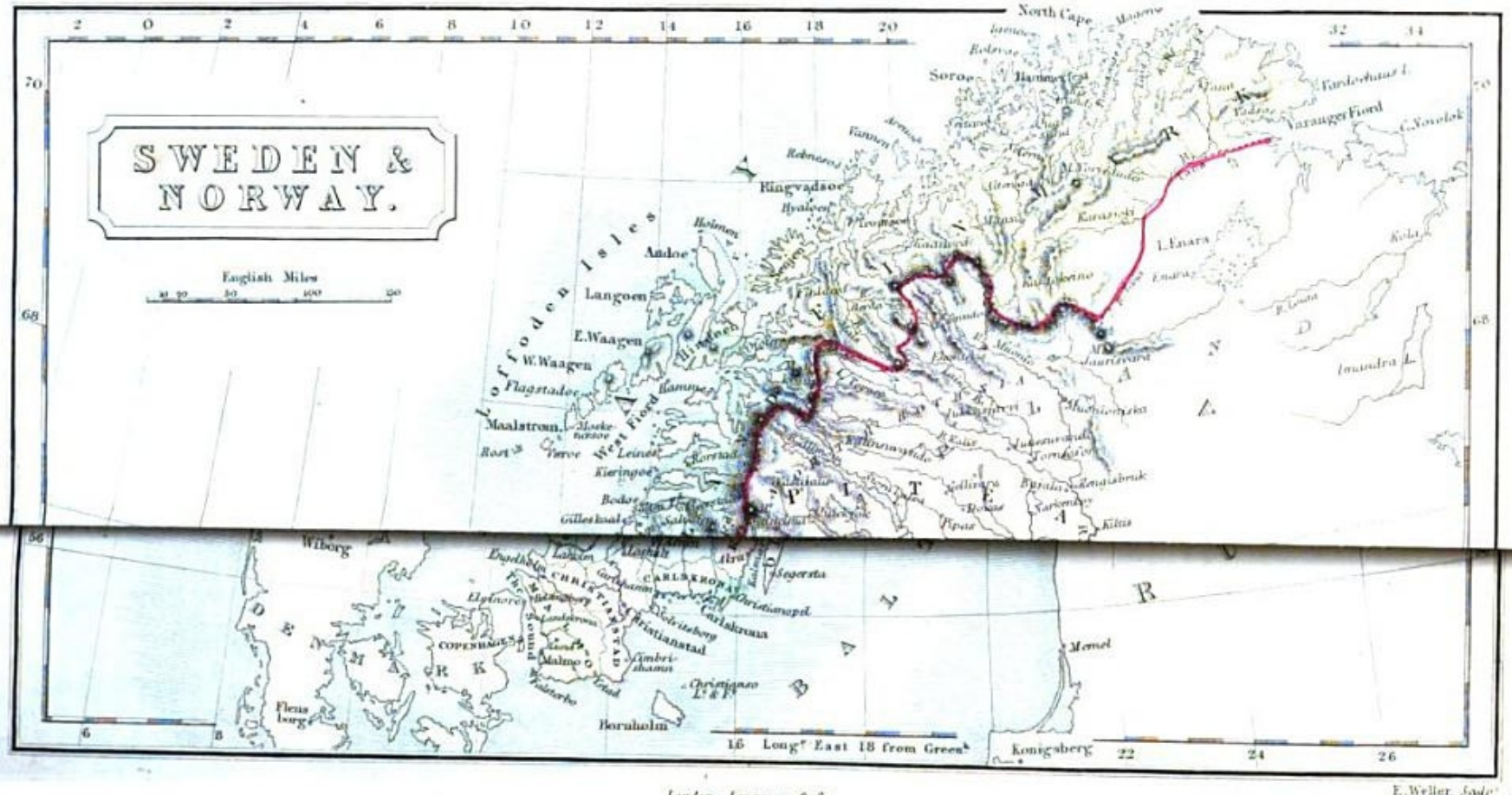
Digitized by Google

Sweden & Norway Area 292000 Sq Miles Length 950 Miles

Length 365 Miles
England & Wales Area nearly 58000 Sq Miles

Sweden & Norway
Breadth 300 Miles

England & Wales Breadth 270 M



Digitized by Google

flowing into the Skagerrack on the SE., and the North Sea and Atlantic on the W. Many of the Norwegian mountains rise to from 6,000 to 8,000 ft. above the level of the sea. The Snechætta (lat. 62° 35′, long. 9° 40′), 8,120 ft. in height, has been long considered the most elevated point of land; but it is now supposed that the Hurunger Fjeld, in the prov. Bergen, overtops the former by at least 700 ft. The *Fjords* have been sometimes compared to the Scottish *friths*; but they are generally smaller than the latter, and rather resemble the Scottish salt-water *lochs*. They are most numerous on the W. coast, where the Sogne and Hardanger Fjords, with their continuations, stretch inland for at least 100 m. in a direct line, and are of the greatest use as means of communication. Norway has numerous rivers, some of which, as the Glommen, Lougen, and Drammen Nad, all taking a SSE. direction, are of large size; but their courses are so beset with cataracts, that they are of little service for navigation. Lakes are numerous in the E. half of the country, but none of them can be compared in respect of extent to the lakes of Sweden. The W. coast is lined in its entire extent by a vast number of islands. The principal of these are the Lofloden group. The shores of Norway (like the W. coast of almost all countries in high latitudes) are iron-bound, and difficult of access; and at the S. extremity of the Lofloden Isles is the celebrated Maelstrom, which inspires the Norwegian fishermen with as much terror as Charybdis did the ancient navigators of the Mediterranean; and, perhaps, with more reason.

Geology.—The formations of Norway are for the most part primary. The mountains were long supposed to consist almost exclusively of granite, but in reality this rock is far from common. The most abundant rock is gneiss; next to which, though by no means so widely diffused, is mica slate, resting upon and alternating with the gneiss; and in beds subordinate to both, are limestone, quartz, and hornblende. Upon the high table lands, the ground is often covered with blocks of a conglomerate rock, in which pebbles of quartz, felspar, and other crystallised substances are embedded, and which, being smooth and rounded, have evidently been, during a remote but lengthened period, subject to violent friction. (Mr. Lyell (Princip. of Geology, i. 336) denies the occurrence of volcanic action and earthquakes in the Scandinavian peninsula; but his opinion, though entitled to great weight, differs from the statements of some recent travellers, from which it would seem that earthquakes are not unfrequent, and that the physical appearance of the country, especially of its fjords, almost demonstrates that it has at a distant period been upheaved by volcanic action. (See Laing's Norway, pp. 75, 76–114.)

The climate must, of course, vary greatly, according to the elevation of the surface, as well as the difference of latitude; but generally the summers are short, and the changes sudden and extreme. From lat. 58° to 59° the average temp. is about 45° Fahr.; and there is no constant snow-region. The same vegetables and fruits grow as in England, except apricots and peaches. Beech woods cease at 59°. From 59° to 60° the average temp. is about 44° Fahr.: all kinds of grain grow here on the best soils, and the same fruit trees as before, but at 60° the plum ceases to ripen. From 60° to 61° the average temp. on the coast is 43°; in the interior, 41°. In this division the pine and Norway fir become the predominant forest trees, with birch, hazel, and aspen. The elm ceases; and beyond 61° the oak is not seen in perfection. The principal crops are rye, oats, flax, and hemp; but wheat ripens in favourable situations. Between 61° and 62°, the average temp. is about 40°; all the common fruits still ripen; as will wheat, in certain places; but this grain is very precarious and little cultivated. N. of 62° the ash is scarcely seen. The region between 62° and 63° comprises the highest land in the country, and the upper 5,000 ft. of the Doone Fjeld is covered with perpetual snow. The average temp. of the valleys in this zone is about 39° Fahr. Beyond 63°, peas begin to be precarious, cabbage ceases to come to perfection, flax scarcely ripens, and wheat is not seen, except near the sea coast in small quantities; but the pine and fir tribes, birch, mountain ash, and aspen flourish. From 63° to 64, the hardier fruits ripen in sheltered situations only, and oats begin to be a precarious crop. From 64° to 65°, rye, oats, and barley ripen; but beyond 65°, neither oats nor any fruit, except currants, succeed; and the pine begins to degenerate.

Stoves begin to be lighted in Christiania in the middle of Sept., and cannot be dispensed with till the middle of May; the summer then advances rapidly, and the thermometer, in July, often rises at noon to above 80° Fahr.; but the heats are of short duration, frosts frequently occurring in the latter end of August. The W. coast, though proverbially rainy and damp, is not unhealthy: in the interior, the atmosphere is usually dry and bracing. In some places vegetation is so quick that the corn is sown and cut within six weeks.

Land and Agriculture.—Norway is essentially an agricultural and pastoral country. In 1855, of a total male population of 585,381, of whom 434,267 were above ten years of age, 309,000 were connected with agriculture, either as proprietors, farmers, or farm-servants. Only about 100th part of the entire surface is under culture, or otherwise productive. As Norway is a country where the feudal system was never established, the land is mostly the property of those who cultivate it. Such land is termed *udal*, a word in its origin probably the same with the German word *adel*, or noble, since it carries an equivalent meaning in all its applications. Udal land is noble land, held from or under no superior, not even the king; but by the same right by which the crown itself is held. It is possessed, consequently, without charter, and is not subject to fines, escheats, forfeitures, nor personal suit or service; nor to any of the burdens affecting land held by feudal tenure direct from the sovereign, or from his superior vassal. The succession to land is not vested in the eldest male heir. On the contrary, all the kindred of the udalman in possession are what is called *odelsbaarn* to his land, and have, in order of consanguinity, a certain interest in it, called *odelsbaarn ret*. Hence, if the udalman in possession should sell or alienate his land, the next of kin is entitled to redeem it on repaying the purchase money; and if he should decline to do so, it is in the power of the one next him to claim his odelsbaarn ret. Formerly the power to redeem estates was unlimited in point of time; but as a power of this sort, by rendering the title of the occupier insecure, prevented him from making any improvements, the right of redemption has latterly been limited to within 5 years of the sale; and it has also been ordered that the purchaser shall be indemnified for his improvements.

Farms generally consist of 3 divisions; the infield, or acres enclosed for the crops and best hay; the mark, or outfield, also enclosed for pasturing the cattle; and the *seater*, a tract of unmeasured grass land, which is sometimes 30 or 40 m. distant; and on which chalêts are erected, and the cattle are pastured for 3 or 4 months in summer. A farm of average size comprises about 290 acres,

Digitized by Google

exclusive of the *seater*. Of this extent, 148 acres, comprising the in-field, are commonly cleared: only about one-third, however, yields corn and potatoes, the remainder being always in grass for hay. The out-field is usually half cleared, being fenced off and ploughed in patches; and it is in this division that the housemen or cottiers, paying from 3 to 4 dolls. each, of rent, and working at about 8 skillings (6*d*.) a day, with their food, have their houses and their fenced pieces of land. The accommodations for the cattle are very good, the cow-house being floored with timber, and lighted by glass windows: the cows are tended by a woman. Almost all the houses are of wood: they are generally comfortable; and owing to the facility with which they may be constructed, there is but little difference between the residence of a public functionary, a clergyman, or a gentleman of large property, and that of a bond or peasant proprietor. The division of property among children prevents the erection of any splendid mansions, or any thing more expensive than is proportioned to the property upon which it stands.

Except in a few favoured spots the arable land is, generally speaking, sandy and poor. Hence, if a few days of warm sunshine succeed each other without rain, as is frequently the case in the early part of summer, the roots of the corn and grass are apt to be burned up. In autumn, on the contrary, the decreased warmth prevents the corn from ripening, and not unusually, even in favourable seasons, it is injured by violent autumnal rains. There are mostly several nights about the end of August, distinguished by the name of *iron nights*, on account of their sometimes blasting the promise of the fairest harvests. The crops are, in consequence, extremely precarious. Even in the best years a considerable supply of corn has to be imported; and in bad years the inhabs., especially in the interior, have to sustain the greatest privations.

In addition to the depressing influence of the soil and climate the peasantry are said to be deficient in industry, and wedded to routine practices; and a considerable influence is also ascribed, in the production of dearths, to the great consumption of corn in distilleries. However, the latter complaint seems without foundation. The demand for corn for distillation makes, no doubt, a greater quantity be sown in ordinary years than if it were prohibited; so that in bad years, when distillation almost wholly ceases, there is a greater supply to meet the necessities of the people. Rye is the crop most extensively cultivated, and next to it oats, flax, and potatoes. The agricultural implements, which are usually made by the peasants themselves, are better than could, under such circumstances, be expected; even thrashing machines are pretty common.

All over Norway there are corn magazines, to which the farmers may send their surplus produce, and whence, also, they may be supplied with loans of corn; the depositors receiving at the rate of 12½ per cent. of increase on the corn deposited for a twelvemonth, and the borrowers replacing the quantities advanced at the expiration of the same period, with 25 per cent. increase. These depositories are found to be useful in consequence of the extreme precariousness of the crops. The difference between the increase allowed in the corn received and that charged on the corn given out, pays the expenses. In the north, and even in other parts, in years of scarcity, the inner rind of the fir tree, kiln-dried and ground, is used, together with corn meal, for bread. Some travellers have denied this fact; but, as it seems, for no sufficient reason. The inner rind next the wood is taken off in flakes, like foolscap paper, steeped in warm water, and hung to dry in the sun. When dry it is pounded in small pieces, mixed with corn, and ground on the hand-mill. The extended cultivation of the potato, since the peace, has probably placed the inhabs. of the lower country beyond the necessity of generally using it; but those in the higher parts use it, more or less, every year. It is not unpalatable, but is costly.

The most profitable branch of rural industry is cattle breeding. The cattle are small in the bone, thin skinned, usually red or white, and obviously of the same stock with the common unimproved breed in England, France, and Germany. The cows give excellent milk, and daily produce enters largely into the food of every family. Goats are a favourite stock, and on every farm they appear more numerous than sheep. Hogs are not numerous. The horses are, in general, inferior to those of Sweden. The real Norwegian pony, however, met with in the N. of the country, is an admirable little animal, fast going, hardy, and fit for a great deal of work. A few are occasionally imported into Scotland. The live stock suffers frequently from wolves and bears, the hunting of both of which is actively pursued; but that of the latter not so much as formerly, the price of bear skins having greatly fallen. The elk, and many kinds of game, are found; and in the N. large herds of reindeer constitute the chief wealth of the Laplanders. Aquatic birds are so abundant, that the search after their eggs occupies a large share of the attention of the inhabs. of the coast.

From the want of markets, and of other facilities for commerce, the Norwegian farmer is seldom able to convert his surplus produce or savings into money. His object, indeed, is not to raise produce for sale, but to supply himself with the various materials required for the food, drink, and clothing of his family. The food of the labourers who work for gentlemen or large farmers, consists of black rye bread and salted butter or cheese, for breakfast; and boiled barley and a herring, or some other fish, with beer, for dinner. Once a week, and sometimes twice, they have fresh meat. The common people live nearly in the same way, only not quite so well; and some who have large families are often in great distress. The labourers get frequently at their meals an allowance of home-made potato or corn spirit. The latter article is especially abundant, being distilled, without let or hindrance, on every farm. Great quantities are drunk, its price being only about 14*d*. a gallon. The farm labourers, called housemen, live in cottages on the mark or outfield, at a fixed rent for 2 lives, under the obligation of furnishing a certain number of days' work on the main farm, at a certain rate of wages. A system in some respects similar prevails in some of the best cultivated districts of Scotland, but the Norwegian houseman is better off than the Scottish married farm servant. Land being of less value in Norway, the houseman has more of it; in fact, it constitutes a complete little farm, keeping generally 2 cows and some sheep, and producing a full subsistence for a family. The law of the country has especially favoured the class of housemen. In default of a written agreement registered in the par. court, the houseman is presumed to hold his possession for his own life and that of his wife, at the rent last paid by him. He may give up his land and remove, on giving 6 months' notice, before the ordinary term, and is entitled to the value of the buildings put up at his own expense, which he may have left; but the landlord cannot remove him or his widow, so long as the stipulated rent and work are paid.

Fisheries.—Above the parallel of lat. 65°, agri-

Digitized by Google

culture and cattle rearing cease to be the primary occupations of the pop. The inhabs. of Norrland and Finmark subsist chiefly by fishing, when they are not supported on the produce of herds of reindeer. The Lofloden Islands are the principal seats of the cod-fishery, and the average value of the fish caught there during the winter has been estimated at 86,500*l*. The winter fishery lasts from Feb. to April; after which the fishermen are either employed by the Russian merchants, or retire to their homes to begin the herring fishery. Besides these general fisheries, in every fiord, even at 100 m. from the sea, an abundance of cod, whiting, haddocks, flounders, and herrings is caught daily for use and for sale, by the seafaring peasantry.

The Forests and Mines of Norway might be rendered two of the principal sources of national wealth. Fir timber and deals are among the chief exports. But the want of navigable rivers, canals, and roads occasions great difficulties in the conveyance of timber to the coast; for it is only during the spring thaws that the rivers or torrents are deep enough to float the timber down to the fjords. No doubt, however, were the timber trade of this country placed on a proper footing, by doing away with the impolitic preference given to American timber, a great stimulus would be given to its importation from Norway; and the advantages thence arising would, it may be fairly presumed, lead to the formation of improved means for supplying the shipping ports with timber and deals. The manufacture of the latter is the principal branch of industry carried on in the country. They are mostly shipped from Christiania and Drammen. Their forests are of the most essential service to the Norwegians, who apply their products to an infinite variety of purposes. Their *summum bonum* seems to consist in the produce of the fir. This affords materials for building their houses, churches, and bridges—for every article of their household furniture—for constructing sledges, carts, and boats—besides fuel for their hearths. With its leaves they strew their floors, and afterwards burn them, and collect the ashes for manure. The birch affords, in its leaves and tender twigs, a grateful fodder for their cattle, and bark for covering their houses. The bark of the elm, in powder, is boiled up with other food to fatten hogs: sometimes also, as already stated, it is used in the composition of their bread.

No coal has yet been worked in Norway; but Berendish, between the N. Cape and Spitzbergen, appears to consist principally of that mineral. Some is occasionally brought thence by Tromsoe and Hammerfest whalers; and, were the forests raised to their due importance by better means of conveyance, it is probable that coal might be supplied to the country in quantities which would render the cutting down of the trees for fuel in a great measure superfluous. The iron of Norway, though inferior to that of Sweden, is of excellent quality, and very generally found. Copper is found at Roraas; and near Kongsberg a silver mine, which has been wrought for upwards of 200 years, was, about the middle of last century, accounted the richest in Europe. In 1768 it produced ore to the value of 79,000*l*.: it has since, however, materially declined. Lead, cobalt, arsenic, and a little gold are met with in various places. At Waloe is a salt mine, producing about 20,000 tons a year. Alum, asbestos, marble, slate, and building stone are among the other mineral products.

Manufactures are almost wholly domestic, the division of labour being carried to a less extent in Norway than in perhaps any other European country. The *bonder*, or agricultural peasantry, build their own houses, make their own chairs, tables, ploughs, carts, harness, iron-work, basket-work, and wood-work; in short, except the window glass, cast iron ware, and pottery, everything about their houses is of their own make. The Norwegian peasant, indeed, unites most trades in his own person, his principal tool for executing all kinds of work in wood being the knife he carries in his girdle. The shoemaker and tailor go round and cobble and sew for a few weeks at each village, getting their maintenance, and being commonly paid over or above, in potatoes, meal, butter, or other produce. Spinning-wheels and looms are at work in every cottage and house in the country, the farmers and country people spinning their own flax and wool, and weaving their own linen and woollen clothes. There are very few fabrics of clothing materials.

Commerce.—The foreign trade of Norway was formerly far more extensive than at present. Centuries ago Bergen and Trondhjem were members of the Hanseatic Association, on the decline of which these towns retained, and still hold separately, the same privileges they enjoyed in conjunction with the other members of that body, though Christiansand and some other minor towns have succeeded, after a long struggle, in obtaining a share of the commercial monopoly. The merchants and shopkeepers in Norway are all licensed burgesses of Bergen, Trondhjem, or other privileged towns, to which they pay a certain tax; and each has a certain tract or circle belonging to his factory, within which no other person is entitled to buy or sell. The imports consist principally of coffee, sugar, tobacco, corn, spices, brandy, wines, and tea, and the exports of fish, timber, and other native produce. The trade of Norrland and Finmark is, however, different from that of the rest of the kingdom. The privileged traders do not supply the inhabs. of these provs. with necessaries, except during the winter fishing season; and as no other Norwegian dare interfere, the trade of these provinces is now almost wholly in the hands of the Russians, whose ships have been, since 1828, allowed admission, free of duty, into every port N. of Tromsoe.

Owing to the thinness of the population and the bad state of the roads and other means of communication, there is but little internal trade. Even in the largest towns, such as Christiania and Trondhjem, there is nothing that can be strictly called a market. It is extremely difficult to get a joint of fresh meat, and a pound of fresh butter is an article not to be purchased even in the midst of summer. Fairs are held at certain seasons of the year, and stores of all kinds of provisions that will keep are laid in at these times; and, if this care be neglected, great inconveniences are suffered, as scarcely anything is to be bought retail. Latterly some improvements have been made in the facilities of interchange; but still, commercial intercourse in Norway is in a very primitive condition compared with that of other European countries.

Wood, in various stages of manufacture, forms the staple export of Norway. The quantity shipped was as follows in the three years 1859–60:

In 1858	721,024	loads
1859	724,822	„
1860	778,058	„

Next in importance to the commerce in wood are the fisheries, which afford the second staple commodity of export, and at the same time give employment and support to the bulk of the population from the Naze to the Warangerfiord, at the entrance of the White Sea. The fisheries are divided into the herring fishery, which usually

Digitized by Google

commences soon after the new year; the winter cod fishery, which likewise commences about the end of January; and the spring and summer fishery along the coast of Finmark to the White Sea. The herring fishery continues for about two months. It is confined exclusively to the district between the Naze and the headland of Stat, a distance of about 300 miles. The fish are generally caught in nets, salted, and then packed in barrels for exportation. The estimated quantities taken during three years were:—

	1858	1859	1860
Number of Barrels .	400,000	610,000	874,000
Estimated Value to the Fishermen in Specie-dalras . . .	720,000	988,800	1,311,000

The number of boats employed annually does not greatly vary. In 1860 there were 2,632 boats, besides 276 vessels, manned together by 13,786 men, with 46,215 nets, and employing 368 salteries, distributed within 300 miles.

The commercial intercourse between Great Britain and Norway is of some importance.

Of foreign and colonial produce, the shipments from Great Britain to Norway average about 120,000*l.* yearly. They comprise coffee, cotton, hides, indigo, palm oil, sugar, tea, and wine. Of shipping, a larger number of Norwegian nationality entered the ports of the United Kingdom with cargoes in 1863 than that of any other foreign country, the arrivals in 1863 amounting to 3,360 ships, with an aggregate of 754,762 tons, against 3,134 ships and 659,591 tons in the year 1862.

The following table shows the relative state of the commercial marine of Norway during the years 1858–60:—

	1858	1859	1860
Number of Ships .	5,784	5,764	5,808
Aggregate Tonnage .	687,740	697,567	694,562
Number of Crews . .	33,713	34,130	33,936

This shows an increase of 59,162 tons during three years. The commercial marine of Norway in 1862 exceeded in amount of tonnage that of Sweden and Denmark together.

Government.—Though Norway is under the same crown with Sweden, she is no more connected with that country than Hanover was formerly with Great Britain. The constitution differs from that of Sweden in many important respects. The Swedish government is in part aristocratical; that of Norway is an hereditary monarchy with a democratic parliament. This, which is called the *Storthing*, consists of a certain number of members, between 75 and 100; about one-third of whom are returned by the towns, and the rest by the rural districts. Every native Norwegian of 25 years of age, who is a burgess of any town, or possesses property, or the life-rent of land to the value of 30*l.*, is entitled to elect and be elected; but for the latter privilege he must not be less than 30 years of age; nor an officer of the crown (which has no representative or organ in the Norwegian storthing); and he must have resided in Norway for 10 years. The country is divided into election districts and sub-districts, according to their pop. The mode of election is double, being performed through the intervention of election-men. In the towns one election-man is chosen by every 50 voters; in the rural sub-districts by every 100 voters: the choosing of these takes place in the parish church at the end of every third year. The election-men afterwards meet at the place appointed for the district or provincial election, and there choose among themselves, or from among the other qualified voters of the district, the representatives to the storthing, in the proportion of one-fourth of the number of election-men for the towns, and one-tenth of those for the rural sub-districts. Substitutes (being those who have the next number of votes) take the places of both election-men and mems. of the storthing, in the event of their unavoidable absence from duty. The storthing meets for three months once in three years, *suo jure*, and not by any writ from the king or the executive. It may be convened at other times, but in that case it can pass only temporary acts, which must be ratified during the next ordinary session, otherwise they do not become law. Each storthing settles the taxes for the ensuing three years; enacts, repeals, or alters laws; opens loans on the credit of the state; fixes the administration of the revenue; impeaches and tries before a section of its own body all state ministers, judges, and its own members. The storthing, when elected, divides itself into two houses. One, called the *lay-thing*, has functions corresponding generally to those of the British House of Lords, and is composed of one-fourth of the total number of members of the storthing; the other three-fourths constitute the *odelsthing*, or lower house, and all proposed enactments must originate in this division. A bill which has passed both houses usually becomes law, by receiving the sanction of the king. But the Norwegian storthing enjoys a right which no other legislative assembly in Europe possesses. If a bill pass through both divisions in three successive storthings, on the third occasion it becomes the law of the land without the royal assent; this right was exerted when the Norwegians abolished their hereditary nobility in 1821. Each member of the storthing has an allowance of 1½ dollar a day during its session.

The mode of assembling the people in the country for public business is simple, but curious. A *budstick*, or message-staff, about the size and shape of a constable's baton, with a spike at one end, is made hollow to hold a piece of paper, on which is written the official notice to meet, with the time, place, and object. This is delivered from the court-house of the district to the nearest householder, who is bound by law to carry it, within a certain time, to his nearest neighbour; he must transmit it to the next; and so on. If the owner is not at home, the bearer must stick it 'in the house-father's great chair by the fire-side;' and if the door is locked he must fasten it to the outside. He who, by neglect in passing the budstick, has prevented others from attending, pays a fine for every person so absent.

Justice.—The Norwegian peasantry were never *adscripti glebæ*, subject to local judicatories, as in feudal countries, but subordinate only to the general jurisdiction of the country. The small kings, expelled in the ninth century by Harold Haarfager, seem never to have attained the powers of the great feudal lords in other countries, but were always in some degree dependent upon the general *things*, or courts, of the people. Trial by jury is a very ancient institution in Norway; but many of the details in the administration of justice originated with the Danes. The latter instituted the courts of mutual agreement, one of which exists in each parish, the arbitrators being chosen by the householders every third year. Norway is divided, for legal purposes, into 4 *stifts* and 64 *sorenshriveries*. In each of the latter divisions is a legal court, which sits once a quarter, and in which the sorenshriver, who presides, has only a vote as a member of the jury, a majority of whom decides the case. The *stifts amts*, consisting each of three judges, with assessors, and established in the chief town of each *stift*, are the courts of

Digitized by Google

appeal from the foregoing. The *hoieste-ret*, in Christiania, composed of a president and eight assessors, is the highest court, and one of final resort. The special courts are the *rigs-ret*, or lagthing, the ecclesiastical, and the military tribunals. Judges are responsible in damages for their decisions. Capital punishment has been abolished; slavery in chains, for a longer or shorter period, being the ordinary sentence for all kinds of crimes.

The *religion* is the Lutheran, but much ceremony still remains in the forms of worship. Norway is divided into 5 bishoprics and 336 parishes; the latter divisions are very extensive, but several are frequently under the cure of one priest. The incomes of the par. priests amount to from 800 to 1,600 dolls., those of the bishops to 4,000 dolls. a year. The former are paid by means of rents from glebe lands, a small tithe of corn from each farm, or of fish in some parts, and fees, and other unfixed sources of revenue. There are no dissenters; all sects of Christians are, however, tolerated, but Jews are excluded from settling in Norway.

About one-seventh part of the pop. are receiving *public instruction*. Schoolmasters are settled in each parish, who live either in fixed residences, or move at stated intervals from one place to another, and who frequently attend different schools, devoting one day only in the week to each. They are paid by a small tax levied on householders, besides a personal payment from each scholar, amounting, in the case of agricultural servants, to about 8 skills., or half a day's wages in the year. Instruction in the primary schools is limited to reading, writing, arithmetic, and singing, with sometimes the rudiments of grammar and geography. Almost every town supports a superior school; and in 13 of the principal towns is a *lærde skole*, or college, the instruction in which includes theology, Latin, Greek, Norwegian, German, French, English, mathematics, history, and geography. Christiania has a university, founded by the Danes in 1811, which is modelled on the system of the German universities, but differs from them in the professors not receiving fees, and in which the number of students varies from 600 to 800. There are, also, schools of drawing and architecture, commerce and navigation, and other special schools. Sunday schools have been widely established; and the Society of Public Good maintains a public library in most pars. of the kingdom.

The press in Norway is altogether free. Every man is at liberty to print and publish what he pleases, being responsible, however, for what he does print. No tax exists on newspapers, and somewhat more than 40 are published in the kingdom, besides several scientific journals. But, notwithstanding these aids to science and advancement, Norwegian literature is not in a very flourishing state, and can by no means bear to be compared with that of Denmark or Sweden.

The *army* of Norway consists of about 10,000 infantry, 1,000 cavalry, 1,000 artillerymen, and 150 engineers; in all, 12,150 men. A militia is raised throughout the interior, into which all males, between 27 and 30 years of age, must enter; and on the sea coast there is a kind of marine militia, in which all seafaring men, and inhabs. of seaports of a certain age, must be enrolled. The *naval force* consisted, in 1862, of 3 steam frigates, 8 steam corvettes, and 127 gunboats.

The *public revenue*, for the three years 1863–66, was estimated in the budget at 4,780,110 speciedalrs, or 1,036,022*l.*; the expenditure for the same period at 4,750,000 speciedalrs, or 1,029,120*l.*

People.—The Norwegians are members of the widely spread Teutonic race. The men are, in general, rather small in stature, but well made, and have great muscular power. The Gludbransdal peasants are said to be the most athletic, but they are decidedly, as a body, shorter and slighter of limb than the mountaineers of Dalecarlia, in Sweden. Their complexions and hair are fair, and resemble more of the Danes, and other N. German tribes, than the Swedes. The dress of the men varies greatly in the different districts, being, for the most part, more gay and fanciful than that of the women: in the towns, however, the upper classes have fully adopted the costume common in the rest of Europe. The peasants possess much spirit and fire in their manner, are frank and undaunted, yet not indolent; never fawning on their superiors, yet paying proper respect to those above them. They are, however, generally addicted to drinking, and the standard of morals is said to be, in other respects, higher in Sweden than in Norway. Women are very generally employed in field-labour, and beggars are numerous, especially in the towns. The average number of illegitimate births is about 1 in 5. But illegitimate children are most commonly legitimised by a legal act, and are seldom or never abandoned by their parents. The Norwegians are extremely fond of dancing, music, and dramatic entertainments, which are the principal amusements introduced at their festivities.

History.—Norway is interesting as the original seat of the Northmen, who made such frequent descents on the coasts of England and France in the dark ages, and who were the ancestors of that remarkable people the Normans, who conquered and carried their institutions to England and other of the fairest portions of Europe.

Little is known of the history of Norway before the end of the 9th century, when Harold Haarfager united the whole country under his dominion. Christianity was introduced by Olaf I. in the succeeding century. In 1387 Norway was annexed to Denmark, to which it remained attached till 1814, when the Allied Powers gave it to the Swedes in indemnity for Finland. The Norwegians, indignant at the transfer, took arms, and elected Prince Christian Frederick of Denmark as their king; but the latter resigned the crown in the same year, and the country has since been united to Sweden. This union will probably be maintained without difficulty so long as the Swedish cabinet attempts no rash or violent changes in the internal administration of the country.

NORWICH, a city of England, being a co. of itself, and an important manufacturing town, locally situated in hund. Humbleyard, co. Norfolk, of which it is the cap., on the navigable river Wensum, 56 m. NE. Cambridge, and 96 m. NNE. London, on the Great Eastern railway. Pop. of city, 74,891 in 1861. The co. of the city is of an irregular circular form, with an average diameter of about 5½ m., the city itself standing a little E. of its centre on the slope and summit of a hill, gently rising from the river. The buildings are, in a great measure, circumscribed by the remains of the ancient fortifications which still exist, particularly on the W. and N. sides of the city. The streets, with the exception of Giles Street, and one or two more, are narrow, and so irregularly laid out, as to preclude the possibility of any general description. It has, however, many handsome houses and open spaces, and is well paved, watched, and lighted with gas; and its appearance from a distance is remarkably striking. The castle and cathedral are the principal public buildings, but it has no fewer than 36 par.

Digitized by Google

churches, besides chapels and other edifices. The castle (supposed to have been built at intervals between the 10th and 12th centuries, by Canute, Roger Bigod and others) occupies a commanding eminence near the cattle-market in the centre of the town, and is a very imposing object at a distance: the part now extant forms a large square, on the E. side of which is an entrance tower, recently restored on the original plan. The entire building formerly occupied an area of 23 acres, and had three nearly circular and concentric lines of defence formed by a wall and ditch; the inner ditch, now laid out in gardens, still remains, enclosing the inner ballium, and is crossed by a semicircular bridge of one arch, 40 ft. in diameter, forming one of the largest and most perfect Saxon arches in the kingdom. In 1793, a co. gaol was commenced on the Castle Hill; and at the same time the ditch was enclosed with iron palisades and gates. Within the precincts, also, a new co. hall has been erected in the Tudor style. These modern additions, however, are quite incongruous with the ancient and venerable appearance of the original Norman fabric.

The cathedral, originally built in 1096, but subsequently so repaired and enlarged that it did not assume its present form till the 16th century, is one of the largest and finest ecclesiastical edifices in the kingdom. The plan is almost wholly Norman. It consists of a nave, with side aisles, 2 transepts, and a choir with a semicircular E. end: the whole length from W. to E. is 411 ft., that of the transepts from N. to S. being 191 ft., and the breadth of the nave and choir, 72 ft. The cloisters form a square of 174 ft. within the walls adjoining the S. side of the nave. From the intersection of the cross formed by the nave, choir, and transepts, springs a lofty Anglo-Norman tower of 4 stories, highly ornamented and surmounted by an elegant spire, rising 317 ft. from the basement of the church. The W. entrance is extremely beautiful, and is the best point of view from which the cathedral can be seen; but the friable nature of the stone used in its construction has caused a decay of the more salient ornaments, and thus greatly diminished the external effect. The appearance of the interior is, on the whole, grand and imposing; the architecture, however, is of various eras, from the Anglo-Norman to the English-perpendicular style; and modern alterations and additions have not always been in the best taste. The bishop's diocese comprises the whole of Norfolk, with part of Suffolk. The episcopal palace stands N. of the cathedral, on the site of that built by the founder: it was erected in 1318, and, after undergoing repairs, and receiving considerable enlargements from successive prelates since the Restoration, has become a tolerably commodious residence, attached to which is a large and well-laid out garden, comprising some ruins of the hall belonging to the ancient palace. Near the W. front of the church is an ancient chapel, dedicated to St. John the Evangelist, which had underneath a charnel-house: it is now used as a free grammar-school. Near it are the two ancient gates of St. Ethelbert and Erpingham; the former is in the decorated English, and the latter a fine specimen of the late perpendicular style.

Among the churches, which are here more numerous than in any city except the metropolis, a few deserve notice as good specimens of ancient architecture. St. Peter's, Mancroft, at the corner of the market-place, is a large edifice in the perpendicular style, surmounted at its W. end by a lofty tower; the inside is remarkably light and elegant, and it has a fine altar-piece and E. painted window. The churches of St. Andrew, St. George Colegate, St. Lawrence, and St. Saviour, present similar architectural features, having high towers either of stone or flint. Those of St. Ethelred, St. Benedict, and St. Julian have round towers, and belong apparently to the early Norman era; but they have been much altered and mutilated. Norwich abounds, also, with the remains of other ecclesiastical edifices. The common-hall, in St. Andrew's parish, consists of the nave of a church attached to a monastery of Black Friars. The workhouse till lately occupied an old Flemish convent, near which is the Dutch church, now used as a chapel to the workhouse, and St. Giles's hospital comprises portions of the former church of St. Helen's. There are 2 R. Catholic chapels, and places of worship for Baptists, Independents, Calvinistic Methodists, Wesleyan or Primitive Methodists, Swedenborgians, Unitarians, and members of the Society of Friends. Attached to the various places of worship are numerous Sunday schools, of which about a half are supported by the established church, and the rest by dissenters; the whole furnishing religious instruction to upwards of 7,000 children; besides which, there are several endowed charity-schools, with national, Lancastrian, and infant schools, either wholly or in part supported by subscription, and attended by about 3,500 children of both sexes.

The free grammar-school, founded in 1318, and restored by Edward VI., is maintained out of the funds of a corporation charity, called the Great Hospital: it has an upper and under master, and possesses fellowships and exhibitions at Caius College, Cambridge. The boys' and girls' hospitals, founded in the 17th century, are supported by the produce of estates in trust of the corporation, and furnish clothing and instruction to upwards of 100 children. Doughty's hospital, established in 1517, and under the same patronage, provides for numerous infirm and aged persons; but the principal corporation charity is St. Giles's hospital, near the cathedral, otherwise known as the 'Great,' or 'Old Man's Hospital,' maintained by rents and other property, averaging 7,000*l.* a year, and providing clothing, food, and a small stipend for 165 inmates, besides servants. It appears, however, that till recently these trusts were extensively abused for political purposes.

Among the charitable institutions of Norwich supported by subscriptions, the first place is due to the Norfolk and Norwich hospitals, occupying a large brick building, erected in 1771, and enlarged in 1802; it has accommodation for about 120 in-patients, and has about the same number of out-patients. Bethlehem hospital is a well-endowed lunatic establishment, founded in 1713; and at Thorpe, about 2 m. distant, is the county lunatic asylum. The other principal institutions of this kind are the dispensary, eye infirmary, Magdalen asylum, lying-in charity, and blind asylum, with numerous minor benevolent associations, bible and tract societies, and provident clubs.

The buildings devoted to the purposes of municipal or civil jurisdiction comprise the guildhall, a large old building of the 15th century, but subsequently much altered and enlarged, though even now it be little worthy of so large a town; St. Andrew's, or the new hall, a noble fabric, previously mentioned as having formed part of an old Dominican church; the county hall, in the castle precincts, a fine and commodious building of perpendicular architecture; the new city gaol and bridewell, a modern and well constructed edifice outside the walls, near St. Giles's Gate; and the county gaol and house of correction, on the castle platform, a large but plain building, well adapted

Digitized by Google

for its purpose the establishment being conducted on the system of silence, separate confinement, and hard labour. A commodious corn exchange was erected in 1828, and rebuilt and enlarged in 1861. The cavalry barracks in Porthorpe are substantially built of red brick, enclosing an area of 10 acres. Norwich has also a large workhouse, belonging to the united pars.

Among the literary establishments is the public library, originally formed in 1784, and now occupying a handsome structure in the Grecian style, erected on the site of the old city gaol; the Norfolk and Norwich Literary Institution occupies a building of recent erection, and has a good library and a numerous body of subscribers. In the same building is a museum, but not connected with the above society. A society, called the Norfolk and Norwich Art-Union, has occasional exhibitions. Concerts are held in the common hall in St. Andrew's parish, and the musical festivals are held in St. Andrew's Hall. Norwich has also a neat modern theatre and assembly-rooms, 2 news-rooms, and a mechanics' institute.

Norwich has been celebrated for its manufactures since the æra of Henry I., when the Flemings first settled here, and introduced the spinning and weaving of long woollen stuffs, called *worsteds*, from the name of the village in which the business was first established: the worsted and bombazine trade was also greatly increased during the 16th century, by the immigration of Flemish weavers from the Low Countries. Norwich, however, appears to have attained its greatest prosperity at the close of the last century, when the value of its goods exported to the E. Indies, Russia, and other places abroad (consisting chiefly of camlets and camletees, callamancoes, worsted satins, figured stuffs, lastings, damasks, and shawls), have been estimated to amount to 1,000,000*l.* a year, or to 1-14th part of the British manufactured goods exported at that period. Since then the manufactures of Norwich have materially declined, or rather have not kept pace with their progress in Lancashire and the West Riding of Yorkshire: the greater facilities enjoyed by the latter, in the command of coal, the absence of corporation privileges, and the greater scope given to competition and improvement, have enabled them to produce, at cheaper rates, most of the articles that were at one time peculiar to Norwich. In fact the greater part of the yarn now used in making Norwich fabrics is spun at Bradford, in Yorkshire; and the worsted manufacture of the West Riding is decidedly more extensive and valuable than that of Norfolk. The principal fabrics that are at present manufactured in and about Norwich comprise bandanas, bombazines, and paramattas, fillovers, or ornamental shawls and shawl borders, gauzes and crapes, princettas (a fabric of mixed warp, with a worsted shoot), silk, silk shawls, woollen shawls, jacquard, coach-lace, lustres, shallis and mousselines-de-laine, and fringes, with sacking and horsehair.

Besides its worsted and silk manufactures, Norwich has iron and brass foundries, snuff-mills, vinegar-works, malt-houses, breweries, oil, mustard, and corn-mills; but they are not on an extensive scale. Of late years the manufacture of ladies' boots and shoes has been very extensively introduced into Norwich, and now forms one of its staple businesses. Women and children are principally engaged in the trade, but it also employs a good number of men. The trade of the town consists in the exportation of its manufactures, chiefly to London and other English ports, but partly also abroad, in exchange for corn, coal, and various other articles of consumption. The town has, since 1833, had the important advantage of being accessible to vessels drawing 10 ft. water, by means of the canals connected with the Lowestoff navigation; and its trade is also materially promoted by the Great Eastern railway.

Norwich, which claims to be a bor. by prescription, and received its principal charter constituting it a separate co. in 1403, was governed before the Mun. Reform Act by a mayor, 24 aldermen, and 60 common councilmen; but by the provisions of that act it is divided into 8 wards, and has a mayor, with 15 other aldermen, and 48 councillors. The bor. has also a commission of the peace under a recorder, and a sheriff's court for the recovery of debts to any amount. The assizes and quarter sessions for the co. are also held here. Norwich has returned 2 members to the H. of C. since the 25th Edward I., the right of election, down to the Reform Act, being vested in the freemen and freeholders not receiving alms. The electoral limits were left untouched by the Boundary Act, except that the castle precinct was included. Registered electors, 5,506 in 1865. Norwich is likewise a polling-place and principal election town for the E. div. of Norfolk. Markets on Wednesday and Saturday, but chiefly on the latter, for corn and cattle: large horse and sheep fairs, day before Good Friday, Easter Monday, and Whit-Monday.

Norwich is supposed to have risen from the decay of an old Roman town, now known as Castor St. Edmund's, probably the *Venta Icenorum* of antiquity. A royal fortress was erected here by the East-Angles in the 6th century, and a town was gradually formed round it, which, even before the Norman Conquest, was so important as to have a mint and 25 par. churches, with 1,320 burgesses. William the Conqueror bestowed the castle on Roger Bigod, one of his Norman followers, who probably erected the present keep. It continued in the possession of his descendants till the reign of King John, when it was seized by the king and finally surrendered to the crown in 1224. In the reign of Henry I. a colony of Flemings came over, who were joined by a still greater number of immigrants in 1336, from which time Norwich became an important seat of manufactures. In 1403, Henry IV. separated the city from the co., and made it a co. of itself with peculiar privileges. Its prosperity, however, owing to plague, scarcity, and frequent fires, had begun to decline, when, in 1566, a fresh immigration took place of 4,000 Flemings, who had fled from the persecutions of the Duke of Alva. In the civil wars of Charles I. Norwich declared for the parliament, and was occupied by its forces till Cromwell became protector. It is remarkable in ecclesiastical history for its numerous convents and other religious establishments, the funds of which have in most cases been converted to charitable uses, and placed in the trust of the corporation. Among other distinguished persons Norwich has given birth to Matthew Parker, archbishop of Canterbury in the reign of Elizabeth; John Cosin, bishop of Durham, Dr. Kaye, one of the founders of Gonville-and-Caius College, Cambridge; Dr. Samuel Clarke, the author of the famous work on the Attributes; and Beloe, the translator of Herodotus.

NORWOOD, a populous village of England, hunds. Brixton and Wallington, co. Surrey, on the top and sides of a steep range of hills, 5½ m. S. London, on the London and Brighton railway. Pop. 12,647 in 1861. Norwood is very irregularly laid out, chiefly on a wide and elevated common, commanding an extensive view of the metropolis northward, and of the plains of Surrey southward. The neighbourhood is studded with villas, belonging partly to merchants and others

Digitized by Google

engaged in business in the city, and partly to persons retired from active pursuits. Of late years, Norwood has been a good deal frequented in consequence of the discovery of a mineral spring at a place called *Beau-lieu*, or Beulah. On the N. acclivity of the hill is a handsome church, opened in 1825 (subordinate to Lambeth), with a Corinthian portico and steeple. There are, also, places of worship for Wesleyan Methodists and Independents, with attached Sunday schools. A school of industry, established here in 1812, furnishes instruction in reading, writing, and needlework, to nearly 300 girls. Here also is a large national school for children of both sexes, and a Lancastrian school, attended by about 200 boys. But the principal distinction of Norwood is the South-Metropolitan Cemetery. It comprises about 40 acres, has two fine chapels, and is well laid out with many handsome monuments.

NOTO, a city of Italy, island of Sicily, prov. Syracuse, cap. distr., on a hill near the Noto, and 16 m. SW. Syracuse. Pop. 12,529 in 1862. The city stands near the site of the ancient *Netum*, now called Vecchio Noto, the surviving inhabs. of which removed thither after the destruction of their city by an earthquake in 1693. Noto has large squares and regular streets, and is one of the best built, most agreeable cities of the island. Besides many handsome private residences, it has various ecclesiastical buildings, a council-house, lyceum, and hospital. Some, however, of its public buildings, being on too magnificent and expensive a scale for a provincial town, are unfinished. There is in this city an excellent private museum, especially of medals and coins, and also of antiquities and minerals. The ruins of an amphitheatre and of a gymnasium are the principal remains of the ancient city, which stood about 4 m. NW. the modern town. It is rather unhealthy, but is surrounded by a very fertile tract of country, in the produce of which it has an active trade.

NOTTINGHAM, a central co. of England, in the basin of the Trent, having N. the cos. of York and Lincoln, E. the latter and Leicester, and W. Derby. It is oval-shaped. Length, N. to S., 50 m. Area, 822 sq. m., or 526,076 acres, of which about 470,000 are arable, meadow, and pasture. The Trent partly traverses and partly bounds the co. on the E., and it is also traversed by its important tributary, the Idle. Excepting the vales of the Trent and Belvoir, the surface is mostly hilly and uneven, but the hills do not rise to any considerable height. The soil in the vales is either a sandy or a clayey loam, and is very fertile; elsewhere it is principally sandy and gravelly. The climate is reckoned peculiarly dry and good. The ancient forest of Sherwood, the scene of the exploits of Robin Hood and his companions, anciently covered the greater part of the hilly portion of this co. along its W. side, but it has long since been disforested, and now contains some magnificent seats and parks. Agriculture, though still susceptible of material improvement, is, on the whole good. The vale of the Trent is famous for its crops of oats, but wheat, barley, beans, peas, and cabbages are also extensively grown. There is a considerable extent of grass and meadow land, and irrigation has been extensively practised, particularly on the estate belonging to the Duke of Portland. The breeding of heavy black horses is pursued to some extent. Cattle, principally of the short-horned variety. Estates of all sizes; many small. Farms generally small, and mostly held at will. Coal is abundant in the W. parts of the co. Nottinghamshire is the grand seat of the manufacture of bobbinet, or Nottingham lace, and also of the manufacture of cotton and silk stockings. It is divided into 6 wards, 1 liberty, and 285 parishes. It returns 10 mems. to the H. of C., viz. 4 for the co., and 2 each for the bors. of Nottingham, Newark, and East Retford, which are its principal towns. Reg. electors for the co. 7,492 in 1865, being 4,065 for the northern, and 3,427 for the southern division. At the census of 1861, the co. had 62,519 inhab. houses, and 293,867 inhab., while, in 1841, the co. had 50,550 inhab. houses, and 249,910 inhab.

NOTTINGHAM, a parl. and mun. bor., and extensive manufacturing town of England, and co. of itself, locally situated in the above co., of which it is the cap., hund. Broxtow, on the Leen, about ¾ m. from its junction with the Trent, 14 m. E. by S. Derby, and 128 m. NNW. London by Great Northern railway. Pop. 74,693 in 1861. Area, of parl. bor., which is co-extensive with the co. of the town, and comprises three pars., 2,610 acres. The town stands partly at the bottom and partly on the sides of a steep red sandstone rock, the summit of which is crowned by a modern building, called the castle, occupying the site of a castle built by the son of William the Conqueror, and demolished by order of Charles II. The streets, many of which rise above each other in successive terraces, are very narrow, and irregularly laid out: two long thoroughfares run nearly parallel N. and S., crossed at right angles by other streets, and considerable improvements have taken place in the N. part of the town. All the streets are well paved and lighted with gas; there is a good supply of water from two companies, and the police is effective. The market-place, which is spacious, and surrounded by handsome buildings, has, at its E. end, the exchange, a quadrangular building of four stories, erected at the beginning of last century, and much improved within recent years. The county hall, rebuilt in 1854, is another very conspicuous edifice, comprising two law courts, a grand-jury room and other apartments, for the business of the assizes. Behind it, and connected by a long covered passage, is the co. prison, built on the edge of a rock, below which, at a depth of 70 ft., is the densely crowded and low quarter, called the Marsh. The building has been altered and enlarged at various times, but is even now very ill-suited for carrying on any efficient system of prison discipline: the supervision and control of the prisoners is hence no easy task, and the entire management is susceptible of great improvement. The borough house of correction, or 'St. John's' prison, so called from occupying the site of an old monastery, is conveniently situated for its purpose; and shortly after the passing of the Gaol Acts was re-constructed, on the principles of classification. It comprises two sides of a square, each three stories high, possesses considerable capabilities, and is in an efficient state, both as respects discipline and general management. The town-hall is a large building, three stories high; while the corn exchange, completed 1850, is also of considerable size, being 77 ft. by 55. The other public buildings consist of a small theatre, little frequented, the cavalry-barracks in the castle park, the foot-barracks, the yeomanry riding-house, and the grand stand on the race-course N. of the town; with nine churches and chapels, besides numerous places of worship for dissenters.

St. Mary's church, standing on a bold eminence, 170 ft. above the level of the adjacent meadows, is a cruciform structure, in the perpendicular style, with an elegant square tower, rising from the intersection of the nave and transepts. Some years ago it

Digitized by Google

underwent a thorough repair, on a plan consistent with its original architecture, and is now the handsomest church of the town: the living is a vicarage, of the annual value of 700*l.*, with a glebe-house, in the gift of Earl Manvers.. St. Peter's, near the market-place, is a building of mixed architecture, partly Saxon and partly Gothic, with tasteless modern additions, being remarkable chiefly for its lofty spire. St. Nicholas, erected in 1678, on the site of a more ancient edifice pulled down during the parliamentary wars on account of its proximity to the castle, is of brick, with stone corners: it comprises a nave with 2 side-aisles, and has a light appearance outside, as well as good interior accommodation. St. James's church, on Standard Hill, in the district called the Park, is a modern edifice in the perpendicular style, with a low embattled tower. St. Paul's church, of Grecian architecture, with a Doric portico, is capable of accommodating upwards of 2,500 persons. It was formerly subordinate to St. Mary's, but has more recently been made an independent district parish church. Trinity church is a handsome Gothic structure, with a tower and spire, fitted to accommodate 1,400 persons. There are numerous places of worship for dissenters, including a Rom. Cath. chapel, meeting-house for the Society of Friends, and Jews' synagogue, connected with which, as well as the churches, are above 30 Sunday schools. The Blue-coat school furnishes clothing and instruction to 60 boys and 20 girls; there are also a national school, Lancastrian schools, subscription schools, and infant schools. The free grammar school was founded in 1513, and before the close of the last century had fallen into disuse; but in 1807 the establishment was revived, and it now furnishes the means of a respectable classical education.

The other charities of Nottingham comprise, 1. Plumtree hospital (founded in the reign of Richard II., and subsequently enlarged), for thirteen aged widows, besides out-pensioners; 2. Collins' hospital, which provides ample accommodation for twenty-four poor men and women, with a stipend and allowance of coals; and 3. Lambly hospital, for decayed burgesses or their widows; besides which several other charities confer essential benefits on the infirm and aged of both sexes. On Standard Hill is the general hospital or infirmary, standing in a spacious enclosure, and comprising a centre and two wings, with large airy wards for patients, about 1,300 of whom are relieved, on an average, every year. The lunatic asylum, opened in 1812, is in New Sneinton, and has good accommodation not only for pauper but other patients. Nottingham has likewise two dispensaries, and several other benevolent institutions. The chief literary establishment of the town is the public library and news-room in the market-place, which has a collection of more than 8,000 vols., a museum of mineralogy, and lecture-rooms, with an attached literary society. A mechanics' institute, established in 1824, has a considerable library.

Nottingham is celebrated as the centre of the bobbin-net and lace manufacture, besides which it enjoys, in common with Derby and Leicester, a large share of the hosiery business. The first attempt at the manufacture of lace by machinery dates as early as 1768; but though this was followed by many subsequent attempts to shorten the tedious process of making lace on the pillow, it was not till 1809 that Mr. Heathcoat of Tiverton, discovered the correct principle of the bobbin-net frame, and obtained a patent for his invention. Steam-power, first introduced in 1816, and becoming general in 1822–23, gave a great stimulus to the trade, which was further increased on the expiration of Heathcoat's patent. Prices fell in proportion to the increased production; and the Nottingham lace-frame soon became the means of general supply, rivalling and supplanting, in plain nets, the most finished productions of France and the Netherlands; so much so that large quantities were smuggled into those very countries from which lace was formerly smuggled into England. At present there are supposed to be about 1,800 bobbin-net and warp-lace frames employed in the town and its immediate vicinity. Subordinate to its other departments, the town has several cotton, worsted, and silk mills. Nottingham has likewise very extensive establishments for making bobbin-net and stocking-frame machinery, large bleaching-works, malthouses, and breweries. The Nottingham canal connects the town northward with the Codnor iron and coal district, and southward with the Trent and the great canal system of the N. midland counties. It is, also, connected by railway with all the midland towns.

Nottingham claims to be a bor. by prescription, but received charters from Henry II. and many subsequent monarchs, Henry VI. having granted to it the additional privilege of being a co. of itself. It is divided, under the Municipal Reform Act, into 7 wards; and is governed by a mayor, 13 aldermen, and 42 councillors: it has likewise a commission of the peace under a recorder. The assizes, both for the bor. and co., are held in spring and summer; and quarter sessions for the S. div. of the co., in Jan., April, June, and Oct. Nottingham has sent 2 mems. to the H. of C. since the 12th Edward I., the right of election down to the Reform Act being in the freemen (by birth, apprenticeship, and purchase), and in freeholders to the amount of 40s. The electoral limits were not altered by the Boundary Act. Reg. electors, 6,560 in 1865. Nottingham is also a polling-place for the NW. div. of the co. Markets on Wednesday and Saturday, but principally on the latter. Large fairs for cattle, cheese, and agricultural produce, March 7th, 8th, and 9th; Oct. 2d, 3d, and 4th and 3 other smaller fairs.

The origin of Nottingham is involved in obscurity; but, so early as in the time of Alfred, it was of sufficient importance to give its name to the co. The castle was built by William Peverill, the natural son of William the Conqueror. Edward III. held several parliaments here, in one of which were enacted the laws relating to the settlement of the Flemish manufacturers. Nottingham was the chief place of rendezvous for the troops of Edward IV. and Richard III. during the wars of the Roses; and it was here, in 1642, that Charles I. formally raised his standard against the parliament. The inhabs., however, being attached to the republican cause, the king was soon compelled to abandon the town and castle to the parliamentary forces. Nottingham has been the scene, in more recent times, of disturbances among the working classes. In 1811, when considerable distress prevailed among the weavers in consequence of the exclusion of British produce from the continental markets, combinations were formed amongst the workmen for the purposes of breaking the frames, which they erroneously supposed had thrown them out of employment; and to such an extent did they proceed, as to call for the most vigorous interference of the legislature. Disturbances of a minor nature occurred several times since that period: but the only serious riot took place on the 8th Oct. 1831, during the agitation preceding the passing of the Reform Act, when the rioters burnt down the castle.

NOVARA (an. *Novaria*), a city of North Italy, cap. of prov. of same name, on an eminence between the Gogna and Terdopdia, 52 m. NE. Turin, and

Digitized by Google

27 m. W. by S. Milan, on the railway between Turin and Milan. Pop. 26,963 in 1862. The city is surrounded by ramparts and ditches, and defended by a castle. Though the streets are mostly narrow, it is, on the whole, tolerably well built, and has many handsome residences. The cathedral, the Dominican church, and that of St. Gaudenzio, and the large barracks, are the principal public edifices. Novara has numerous convents, several hospitals and colleges, a theatre, and a governm. loan bank. It is a bishop's see, and has manufactures of silk and linen fabrics, and 2 large annual fairs. Novara became famous in modern times for the battle fought here between Carlo Alberto, king of Sardinia, and the Austrians, Feb. 23, 1849.

NOVA SCOTIA, one of the British colonies of N. America, consisting of an oblong-shaped peninsula, between lat. 43° and 46° N., and long. 61° and 67° W.; connected with New Brunswick by a low sandy isthmus, only 14 m. across, and separated from Cape Breton by the narrow strait called the Gulf of Canseaw. It is about 300 m. in length, and of very various breadth. Area, according to Haliburton, 15,620 sq. m., about 1-5th part of which consists of lakes, rivers, and salt-water inlets. Pop. 330,857 in 1861. The coast-line is extremely irregular, forming numerous capes and bays. Capes George and Canseaw are the chief promontories on the NE. side, and at the S. extremity is Cape Sable. The basin of Minas is a deep inlet on the NW. side of the peninsula, forming a part of the Bay of Fundy, which separates Nova Scotia from New Brunswick. St. Mary's and Argyle Bays are on its SW. side; Pictou, Antigonishe, and Chedebucto Bays form the chief irregularities on the N. coast; and the E. coast, from Cape Canseaw to Cape Sable, is indented with almost innumerable small bays, harbours, and rivers. Rocks and islands fringe its shores, and the aspect of the entire Atlantic coast is exceedingly picturesque. Deep water is found, almost without exception, close to the rocks and islands; and the peninsula presents towards the Bay of Fundy bold and almost precipitous cliffs. The interior is intersected in almost every direction by streams, rivers, and lakes: but, with the exception of Annapolis River and Lake Rossignol, connected with the sea by the river Mersey, most of them are of very inferior size. The peninsula has no elevations deserving the name of mountains; its highest point, Mount Ardoise, between Windsor and Halifax, not rising more than 700 ft. above the sea. A pretty high ridge of hills skirts the shore of the Bay of Fundy.

As respects geological constitution, the greater part of Nova Scotia may be described as a low range running from SW. to NE., resting on solid rocks of granite, trap, and slate alternately. Towards the E. end of the peninsula are beds of sandstone, greywacke, gypsum, limestone, porphyry, and many other kinds of rock; and on these strata there is usually a rich deep soil. The barren tracts are chiefly of sand or clay; and in these parts, especially about Pictou, are the great coalfields of the peninsula. Iron is abundantly interspersed among the coal strata, and different varieties of lead and copper ore are met with, though in smaller quantities. Near Pictou are several brine springs, one of which is saturated with salt in the proportion of 12 to 88 of water.

The climate of Nova Scotia, with respect to temperature, bears a general resemblance to that of Lower Canada, and is subject to the same great and sudden variations. The difference of temperature within 24 hours often exceeds 50°, and a difference of 62° has been known to occur within the same period. These changes, however, are seldom so frequent or extreme in the interior, or in those parts of the prov. less immediately on the Atlantic. Notwithstanding the occasional lowness of temperature, the maritime situation of Nova Scotia tends to abridge the duration of frost. The severe weather usually sets in about the middle of December, and it is not uncommon for the frost to break up at the end of January. The quantity of snow not only varies greatly from year to year, but is also very unequally distributed throughout the prov. The snow-storms are very heavy, some having been known to continue for 60 or 70 hours without intermission. The severity of winter ends late in March, when chill, damp, east and north-east winds succeed, caused by the breaking-up and passage along the coast of vast fields of ice from the Gulf of St. Lawrence. Hence the most disagreeable season in this country is from the vernal equinox to the end of April. Spring approaches tardily and irregularly, the close of May often arriving before the fields are fully clothed with verdure. A very warm summer occupies 3 months, dating from the early part of June. May and June are marked by the prevalence of fogs, especially on the eastern coast, while July and August are usually remarkable for a continuance of calm serene weather. Autumn, the most beautiful season of the year, may vie with that of any country. September and October are very similar to the same months in England; but in November, and even December, there are days which, for beauty, warmth, and mildness, are equal to the loveliest mornings of an English May. Westerly and NW. winds are most prevalent; the fine bear to the wet days a proportion of 8 to 5. The extreme variations of temperature common to this country have not that injurious influence on health which one might naturally expect. Rheumatic and inflammatory complaints are far more prevalent than any other; and a considerable annual mortality occurs from pulmonary consumption. Intermittent fevers, however, so common in Canada and the United States, are here wholly unknown; typhus occurs only in a mitigated form, and the ravages of the yellow fever have never been felt. Nova Scotia, therefore, may, on the whole, be termed a healthy country. Its inhabitants often live to extreme age; many attain ninety and even a hundred years.

As respects agriculture, Nova Scotia is estimated to comprise somewhat more than 5,000,000 acres of land available for tillage, the proportion of land under cultivation at present being to the wilderness as 1 to 20. The first large public grants of land appear to have been made in 1760; and, in less than 13 years from that time, nearly 8,000,000 acres (including the whole of Prince Edward's Island, then a part of Nova Scotia) were granted in lots, ranging from 20,000 to 150,000 acres, to individuals or companies in England. These grants contained conditions of improvement; but the grantees, after having incurred some expense in trying to settle their extensive properties, abandoned the land to its few inhabs., or suffered it to remain absolutely waste. Efforts made to escheat these lands to the crown were repeatedly baffled by the influence of the absentee proprietors; and thus the province was effectually closed against immigration, either from England or the neighbouring colonies. Large grants of escheated land were, however, made on the breaking out of the American war to refugee royalists; but these were seldom occupied, and are now, for the most part, uncultivated, opposing serious obstacles to the cultivation of the lands around them. Licensed occupiers, however, and squatters have improved some portions of these

Digitized by Google

tracts; and to them the progress made by the colony in population and agriculture is in great measure ascribable. The system of selling in lots not exceeding 1,000 acres was introduced in 1827. The largest portion of it, however, has been acquired, not by actual or intending settlers, but by speculators, who, tempted by the low price, have purchased, on account of the timber, or with a view to profit from a future sale. Land is now sold in this colony at a fixed minimum price of 1*s.* 9*d.* per acre.

The country, as respects the quality of land and the state of agriculture, may be divided into three distinct sections. The E. division, formed by a line from the mouth of the river Philip to that of the St. Mary, presents a strong upland soil, well adapted for grain, and varied with strips of rich intervale land along the sides of its rivers. The upland consists principally of a strong loamy clay, intermixed more or less with sand and gravel, the soil of the intervale being a rich, sandy, alluvial loam. The lands about Pictou are very rich and productive, 7 successive crops of wheat being frequently raised without the use of manure. Agriculture, however, is only imperfectly understood, and no proper use is made of the resources of the soil. In the S. district the land is almost wholly upland, with very little intervale or marsh: the soil is extremely rocky, varying from a strong loam to a light sand. Good returns of wheat and the coarser grains are obtained in some places, but the state of the farms generally exhibits the very reverse of intelligence. The unskilful use of manure, the indiscriminate employment of sea-weed, and, in many instances, the total neglect of any manure whatever, have retained those lands in a poor and backward state which better management would have rendered comparatively productive. The NW. division comprises upland, intervale, and marsh land; the first two being poor, and scarcely susceptible of any improvement. The marsh land is of two kinds,—one, called salt-marsh, being little more than a flat surface of spongy soil, overflowed at spring-tides, and covered with a long rank grass, sometimes converted into hay; the other, called the dyke-marsh, owes its formation to the impetuosity of the tide in the Bay of Fundy, which brings along with it fine loamy particles, which it leaves behind as it recedes, and thus, in course of time, a succession of layers raises the surface to the level of spring-tides, when an embankment or dyke, called an *aboiteau*, is formed to prevent any farther overflow. A newly-enclosed marsh is usually left untouched for the first three or four years: in the third year it is fit to receive the plough, and is then sown with wheat, the first crop averaging about 60 bushels an acre; and on long cultivated marshes the returns average about 40 bushels of wheat and 2½ tons an acre of hay. The crops usually cultivated are wheat, oats, and barley, with smaller quantities of peas, buck-wheat, and rye. But though, in a fine district, the supplies of corn exceed the demand, this is not the case generally; and the prov. does not, even in the best years, raise enough of corn for its own consumption, there being uniformly a large importation of flour from the U. States. Potatoes are universally cultivated, and the failure of the crops is generally productive of a great deal of distress. Crops of beans or cabbage are rarely seen, and horticulture meets with very little attention. Good dairy-farms are found in the NW. division. Hired labour is difficult to procure, and too expensive to allow of its adoption, except by the more wealthy. Labourers (who do not exist here as a separate class, but comprise the more indigent of the new settlers) are usually hired during the 6 months of summer.

The forests of Nova Scotia abound with good timber: pine and birch, oak, beech, ash, and maple are the most common trees. Many of the inhab. have for years been supported by the timber trade, timber being, next to fish, the great article of export. The principal wild animals of the province are the moose-deer, carriboo, bear, loup-cervier, fox, martin, otter, mink, and squirrel. Hunting and trapping were once extensively pursued; but in proportion as the country has become settled, the number of animals has gradually but rapidly decreased, so that the exports of furs are now insignificant. The rivers abound with many varieties of freshwater fish; besides which, cod, herrings, mackerel, halibut, and other kinds of sea-fish, are found in the deep bays of the coast. Chedabucto Bay and Annapolis Basin are the principal stations for the herring and mackerel fishery; but the inhab. share, also, in the whale, seal, and cod fisheries; and this branch of industry has for some years been on the increase.

Another important branch of employment in Nova Scotia is mining. Coal and iron are abundant, and are extensively wrought. Gypsum, which abounds in the W. districts, is also highly prized in the U. States as manure. A stone is found in many parts of the prov. extremely well adapted for grindstones, which are celebrated all over America under the appellation of 'Nova Scotia blue grits.' The manufactures are unimportant: the weaving of coarse woollen cloths, called *homespun*, is pretty general throughout the colony; and carding mills are established in some parts. Carpets, also, are woven in small quantities, and ropes are made of hemp imported from N. Europe. Grist and saw-mills are very numerous; besides which there are several breweries and tan-yards. The position of Nova Scotia, on the extreme W. side of N. America, gives it great commercial advantages; and its trade, especially with the U. States, has been for some years steadily on the increase. The exports, chiefly to Canada, the West Indies, the U. States, and Great Britain, consist of fish and fish-oil, timber, lumber, and coals. The imports comprise corn and flour, British manufactures, and colonial produce. Subjoined is a statement of the value of the imports from and the exports to various countries in the year 1862:

Countries	Imports 1862	Exports 1862
	£	£
United Kingdom . .	596,322	57,702
British Possessions:—		
West Indian . . .	42,854	300,616
North American . .	257,924	259,797
United States . . .	605,403	362,228
Other Countries . .	186,505	149,049
Total	1,689,008	1,129,392

The means of internal communication have been improved within the last few years, and some of the roads are equal to the roads in England. They are partly supported by annual grants from the House of Assembly, and the inhabitants of each district are compelled to furnish, either personally or by substitute, a certain quantity of labour for the same purpose. This system, however, has not been found successful, and large tracts are still left uncultivated, owing either to the absence or wretched condition of the roads. A water communication has been effected between Halifax and

Digitized by Google

Windsor; and the chief towns are connected by railways.

The constitution of Nova Scotia is a representative provincial government. The lieutenant-governor, who is subordinate to the governor-general of British N. America, is commander within the prov., and the supreme civil, as well as military authority. Under him is an executive council of nine members. The people are represented by a legislative council of 21 members, and a house of assembly of 55 members, elected by universal suffrage, with a residence qualification. For the purposes of election, Nova Scotia is divided into 10 counties (including Cape Breton). The counties have 2 mems. each, and the other representatives are returned by the towns. Justice is administered by a court of queen's bench, sitting at Halifax, and by district courts in the different counties. The common and statute laws of England are in force, together with statutes passed by the local legislature, and approved by the queen in council.

The public revenue, in 1862, amounted to 234,133*l.*, and the expenditure to 225,710*l.* Taxation is extremely light, the cost of defence being defrayed by Great Britain, and the inhab. being burdened only with the civil government and local improvements. There are usually from 2,000 to 3,000 troops distributed over New Brunswick, Cape Breton, and Nova Scotia. The latter has, also, an organised militia force of 26 regiments, inc. 44,248 men.

The Church of England is the established religion, and the colony is divided into 32 pars., each of which has a rector salaried by the crown or the Society for the Propagation of the Gospel. Nova Scotia was made a bishopric in 1787, the diocese extending over New Brunswick and Prince Edward's Island, Newfoundland, and the Bermudas. The bishop draws no revenues from the colony, and holds spiritual jurisdiction only over the members of his own church. The Presbyterians, however, are the most numerous body, and a synod meets annually at Halifax. There are numerous Rom. Caths., consisting principally of the Acadians and Irish settlers. The Baptists and Wesleyan Methodists are also important bodies: a complete toleration is granted to all religious denominations. Among the establishments devoted to education, the principal is Windsor College, partly supported by the provincial government, and partly by subscription.

Of the pop. of the prov., the Indians numbered 1,407 at the census of 1861. At the same time there were 5,927 'coloured people,' that is, free negroes. The remainder of the pop. consists of Germans, or their descendants, old French settlers, or 'Acadians,' British emigrants, chiefly from the N. of England and Scotland, a few Irish, and the descendants of refugee loyalists from the U. States. The Acadians congregate in settlements of their own, mixing little with the other colonists.

Nova Scotia was discovered, by John Cabot, in 1497. It was first settled by the French, who called it Acadia. It subsequently fell under the English, having been, in 1627, granted by James I. to Sir W. Alexander, and named Nova Scotia. In 1632 it was restored to France by the treaty of St. Germain's; but it several times subsequently changed masters, and was not finally established in the quiet possession of the British till 1758. At the peace of 1763, the boundaries of this colony were so defined, as to include New Brunswick and Cape Breton; but, in 1784, the former was made a separate government.

NOVELLARA, a town of Central Italy, prov. Reggio, in the plain of the Po, 16 m. NW. Modena. Pop. 6,632 in 1862. The town has some silk and leather manufactures.

NOVGOROD, a gov. of Russia in Europe, between the 57th and 61st degs. of N. lat., and the 30th and 42nd of E. long.; having E. the gov. of Vologda, S. those of Jaroslavl, Tver, and Pskof; W. the latter and Petersburg, and N. the last named and Olonetz. Length, NE. to SW., about 400 m.; breadth, varying from 40 to 160 m. Area, 47,033 sq. m. Pop. 975,201 in 1858. The surface, which in the N. is low and level, rises gradually towards the SW., where the Valdaï plateau reaches an elevation of 1,000 ft. above the sea. The gov. is well watered: principal rivers, Volkhof, Msta, Chexna, Mologda, and Lovat, some of which run towards the Wolga, and others towards the Lake of Ladoga. Among the lakes are those of Bielo-Osero, Voje, and Ilmen. The climate, especially in the N., is more severe than in the gov. of Petersburg, not being tempered by the sea breezes. Except in a few districts, the soil is not eminent for fertility, and night frosts often spoil the crops. Scarcely any orchard trees are met with; but hemp and flax are grown for exportation, and rye, oats, and barley are raised. Timber is an important product; a large part of the gov. is covered with forests, those belonging to the crown covering 2,727,200 deciatines. Few cattle are reared. Next to agriculture, fishing is a principal occupation. The salt-springs of Staraïa-Rouss furnish an adequate supply of salt for this gov. and that of Tver. Manufacturing industry is very backward; there are a few copper, glass, tile, leather, woollen cloth, and other factories. The pop. have, however, a turn for commerce, and the different fairs and markets are well attended. Novgorod is divided into 10 districts: Novgorod, Tikhvine, and Valdaï are among its chief towns. Except some Lutherans among the Finnish inhab., the pop. is principally of the Greek church. Education is very little diffused. The cap. has a gymnasium; and there are schools there and in other parts of the gov. This territory was made a separate gov. in 1776.

NOVGOROD (called *Veliki*, or 'the Great'), a city of Russia, and formerly the most important in that empire, cap. of the above gov., on the Volkhof, near its exit from the Lake Ilmen, 100 m. SSE. Petersburg, and 305 m. NW. Moscow. Pop. 18,768 in 1858. The pop. is estimated to have amounted in the height of its prosperity, in the 15th century, to 400,000. At this period Novgorod, with London, Bergen, and Bruges, constituted the four principal foreign depôts of the Hanseatic League; but the fall of the League, and still more the massacres perpetrated by Ivan Vassilievitch II., in 1570, proved fatal to this great emporium; and it soon after fell into all but irremediable decay. La Motraye, who visited it early in the last century, gives the following description, which will apply nearly as well in the present day. 'Nothing is more deceitful than the view of Novgorod from a distance: its extent, and the number and height of its towers and spires, seem to announce one of the finest cities in Europe; but, on nearing it, the traveller perceives that its walls and houses are only of wood; and, on entering, he finds it ill built and wretchedly paved. Only the churches and a few private residences are of stone or brick. There may be from 80 to 85 churches, including those of the monasteries; besides which, the castle, a large fortress bristling with artillery, is the remaining principal edifice.' (La Motraye, in Schnitzler, 'La Russie,' p. 170.) The town, in fact, though comprising a large space, consists principally of scattered groups of miserable habitations, separated by ruins or by fields, which, it is evident,

Digitized by Google

had once been covered with houses. It is divided into two parts by the Volkhof, here crossed by a handsome bridge of 11 arches, which is almost the only modern structure in the city. The piles, &c. of this bridge are of granite, the rest is chiefly of timber; its entire length is 270 yards, and the breadth of its central arch 85 ft. In the *Torgovaïa*, or market town, are the governor's residence, an anc. palace of the czars, and most of the shops and warehouses.

The *Sofuskaïa*, on the opposite bank of the Volkhof, is about 1½ m. in circuit, and surrounded by an earth rampart and a ditch. In it are the *kreml*, or citadel, the cathedral of St. Sophia, the archbishop's palace, and the various tribunals. The citadel is in many respects similar to the kremlin of Moscow, having a stone wall, flanked with many round and square towers. The cathedral, built between 1044 and 1051, and repaired in 1832, is of stone, somewhat on the model of St. Sophia at Constantinople. It has some remarkable bronze gates, with sculptures in *alto relievo*, representing passages from scripture history; and many of the paintings on its walls are curious, being said to date from a period previously to the revival of the arts in Italy. Novgorod is the seat of a military governor, whose authority extends over the adjacent prov. of Tver. It has a few manufactures of sail-cloth, leather, and vinegar, and some trade in corn. Though not the original capital of Rurick, it became the seat of the Russian government in 864. In the beginning of the 11th century the inhabs. obtained considerable privileges that laid the foundation of their liberty and prosperity; and as the city and its contiguous territory increased in pop. and wealth, they gradually usurped an almost absolute independency; so that, in effect, Novgorod, in the middle ages, constituted more a republic, under the jurisdiction of an elective magistrate, than a state subject to a regular line of hereditary monarchs. During the 12th, 13th, and 14th centuries, Novgorod formed the grand *entrepôt* between the countries E. of Poland and the Hanseatic cities; and its wealth and power seemed so great and well established, and the city itself so impregnable, as to give rise to the proverb—

'*Quis contra Deos et magnam Novogordiam?*'

'Who can resist the Gods and great Novgorod?'

But in 1477 it was obliged to submit to Ivan I., grand duke of Russia. In 1554 it was visited by the famous Richard Chancellour, who describes it as the 'great mart town of all Moscovie, and in greatnesse beyond Moscow.' But not long after it was subjected, as already stated, to the scourge of the destroyer, and fell, never to rise again. The foundation of Petersburg took from it all hope of ever recovering any portion of its ancient prosperity.

NOVI, a town of North Italy, prov. Alessandria, in the fertile plain of Marengo, at the foot of the Apennines, 14 m. SE. Alessandria, on the railway from Alessandria to Genoa. Pop. 11,308 in 1862. Few remains exist of its old castle; its streets are narrow and ill-paved, and its public edifices undeserving of notice. It has, however, a handsome square. It is the seat of civil and commercial tribunals; and has a college and hospital, and manufactures of the best silk twist in the divisions. It is also an *entrepôt* for goods passing between Italy and Germany. On the 16th of Aug. 1799, an obstinate conflict took place near this town, when a French army, under Joubert, who fell in the action, was defeated by the Austro-Russian army, under Suwarrow.

NOVI-BAZAR, a town of Turkey in Europe, prov. Bosnia, cap. Sanjiak, on the Rachka, 130 m. SE. Bosna-Serai. Pop. estimated at from 8,000 to 10,000. It is a town of considerable traffic, the residence of a pacha, and a R. Cath. bishop, and has some warm baths.

NOYON (an. *Noviomagus Veromanduorum*), a town of France, dép. Oise, cap. canton, on the Verse, a tributary of the Oise, 42 m. ENE. Beauvais. Pop. 6,348 in 1861. The town is well built, and surrounded with numerous gardens. The cathedral, erected under Pepin and Charlemagne, is 340 ft. in length, its main entrance being flanked by two towers upwards of 200 ft. in height. Noyon has manufactures of fine linens, tulle, hosiery, leather, and copperas, and a brisk general trade. It was erected into a bishopric in 531. Charlemagne held his court in this town for a considerable period, and in it Hugh Capet was proclaimed king. But it is chiefly remarkable for its having been the birthplace of the famous reformer John Calvin, born here on the 18th of July, 1509.

NUBIA (an. *Ethiopia*), an extensive tract of E. Africa, between the S. boundary of Egypt and the N. limit of Abyssinia; bounded E. by the Red Sea, W. by the desert of Libya, between lat. 13° and 24° N., and long. 33° and 36° E. Estimated area, 360,000 sq. m. Pop. supposed to be about 500,000. The country is divided into Lower Nubia, or Nubia Proper, extending from Egypt to the N. frontier of Dongola, and thence to the junction of the river Atbara or Tacazzé with the Nile: and Upper Nubia, which includes Shendy, Halfay (an. *Meroë*), and Sennaar.

Nubia is situated almost entirely in the basin of the Nile. Rocks and mountains are the characteristics of *Lower Nubia*; and the mountains here press so closely on the river that there would be but little ground left for tillage, if they were not interrupted by lateral plains, the productiveness of which, however, is diminished by the continual encroachments of the deserts. Numerous rocky islands dot the stream, and in some places congregate so as to form rapids, hardly deserving the name of 'cataracts,' by which they are usually designated. Some of these islets are rendered productive (like the high banks of the Nile) by means of the artificial irrigation effected by *sakkeas*, or Persian water-wheels. Between the river and the Red Sea extends the stony and sandy Nubian desert, interspersed here and there with small fertile spots, or oases. On the coast of the latter are a few inconsiderable towns. In *Upper Nubia* the country wears a somewhat different aspect. Instead of one river, several streams flow through it to pour their waters into the majestic Nile. The land is also much more elevated, being situated on the lowest of the three plateaux on which this part of Africa is placed. The S. extremity of Nubia has an elevation of 4,000 ft. above the level of the sea; but, northwards, the elevation gradually lessens, and the Nubian desert forms the gradual transition from the lower course of the Nile to the higher and more southern lands of Africa.

Ranges of mountains, forming a continuation of the range traversing Egypt, skirt the entire Nubian coast of the Red Sea. Those through which the Nile forces its course traverse the river parallel to each other from E. to W., crossing the current instead of accompanying its course from S. to N. *Gebel Snigrè* and *Gebel Safieha* take the former direction. From Faka, on the river Atbara, to Suakim, on the Red Sea, stretches another lateral chain, called the *Orbay Langay*. Several inconsiderable chains and detached rocky hills, offshoots from this chain, are distributed over the E. desert skirting the Red Sea.

The *climate* of Lower Nubia, though intensely hot, is healthy, on account of its dryness: the

Digitized by Google

plague has never been known to reach beyond the second cataract; but the higher districts are subject to those violent tropical rains which contribute in some degree to the regular swelling of the Nile: the N. limit of these rains is between lat. 17° and 17° 30′ N. In Berber and Shendy they continue throughout March and the two succeeding months. The deserts E. and W. of the Nile are subject to violent storms of wind. The *geological structure* of the rocks in Lower Nubia consists of granite and syenite, interspersed with black marble, of which last the second cataract is formed. Slate (in the E. desert), porphyry, sandstone, and limestone, have also been enumerated. In the upper countries coarse grey granite, primitive quartz, and mica-slate are likewise often mentioned by travellers. Along the coast of the Red Sea gold and silver mines are said to exist; but the pacha of Egypt has made more than one unsuccessful attempt to open them. Neither have the 'Emerald' mountains, which pass the Egyptian frontier, yielded any treasure to modern adventurers.

Animals.—The S. parts of Meroë seem to be the N. boundary of the natural habitation of the African elephant. Tigers and lions have been seen in the valleys of Shendy, where crocodiles also abound. Wild dogs and foxes are exceedingly numerous. The hippopotamus seldom ascends the Nile higher than Dongola. Antelopes, of three species, occupy the banks of the White Nile and the desert W. of Dongola. The giraffe (*zerafā*, 'the elegant') inhabits the mountains of Dender, near the Atbara. The principal birds of Nubia are the occipital vulture, the red-throated shrike, and several curious specimens of the family of great-legged thrushes. Bustards are also abundant, with partridges, quails, and several other species of game.

The great enemies to vegetation here, as in other hot countries, are locusts, clouds of which sometimes darken the air, and settling on the land, strip it of every remnant of verdure: on these occasions the inhab. catch and eat them, 'out of self-defence.'

Lower Nubia.—The Nubian valley of the Nile, which ascends as high as the 7th cataract, and ranges between the 9th and 24th degrees N. lat., comprises 13 states, each governed by its melek, or chief, subordinate to the pacha of Egypt. Ten of these states are in Lower, and 3 in Upper Nubia. Between the 1st and 2nd cataracts, in the states of Kenon and Wady Nubia, the Nile flows through a rocky bed, and precipices enclose the river within very narrow limits, scarcely allowing of cultivation on either side; but at short intervals occur those excavated monuments which will hereafter be more minutely described. El-Kalabsheh, the largest village on the W. bank, occupies the site of the an. *Talmis*; and opposite to it is that of *Contra Talmis*, the ruins of which have occupied the attention of modern travellers. At Sebou, lat. 22° 50′ N., the river inclines to the NW., flowing past Derr, which, though a mere village of 200 houses, is the cap. of the 5 states N. of Dongola. Ipsamboûl, with its well-known excavated temples, is near the centre of the state, called Wady Nuba, on the W. bank of the Nile, in lat. 22° 20′ N. The second cataract, which occurs about 35 m. below Ipsamboûl, is formed by numerous rocky islets intercepting the stream, on each side of which in this vicinity stretches an extensive and not unfertile plain.

Through the district of Batn-el-Hadjar, the Nile passes between a chain of syenite hills, those on the W. side having at their foot many deserted villages and monasteries: only the E. side of the valley is now inhabited. The district of *Sakkot* has many poor villages on both banks of the river, possesses numerous antiquities, and is joined southward by *Mahass*, where the most cultivated spots, hitherto situated on the E. bank of the river, are transferred to the opposite shore. Remains of castles, churches, and houses afford evidence that this distr. was formerly well peopled. The course of the Nile here is tortuous: but S. of the 3rd cataract, forming the N. boundary of Dongola, it runs in a direct channel as far as Old Dongola, in lat. 18° 10′ N. The stream then takes a sweep to the NE., preserving that direction for about 100 m., through the highly fertile distr. of Sheygya, ascending beyond the 4th cataract to the island of Mokrat, which divides the stream. The state of Berber commences southward of the 5th cataract, and in this district the villages stand at a considerable distance from the river. Berber, or El-Mekhair, the cap., is near the east bank, about 17 m. below the junction of the Tacazzé with the Nile.

Upper Nubia is a triangular tract lying chiefly between the White Nile, or Bahr-el-Abiad, the Blue Nile, or Bahr-el-Azrek, and the Tacazzé or Atbara. It is divided into the 3 states of Shendy, Halfay, and Sennaar. From the Berber frontier, for some considerable distance southward, the soil of Shendy consists of immense fertile plains, stretching out from both sides of the Nile on elevated ground, at some distance from the river. Shendy-el-Garb 'on the W. bank' is a large and not ill-built village, with about 6,000 inhabs.: Shendy 'on the E. bank' is the cap. of the prov.; and being a place of rest for the caravans from Sennaar, possesses regular and well-stocked markets. N. of Shendy are some ruins, supposed to be those of the ancient *Meroë*. *Halfay* lies between Shendy and Sennaar; and, before the Egyptian conquest by Ismael, the son of Mehemet Ali, belonged to the melek of Sennaar: its chief town, having the same name, lies N. of the confluence of the White with the Blue Nile, which takes place at Khartum. W. of the Bahr-el-Azrek is the distr. of Sennaar, or Fungi: it is a flat and fertile tract, with some large villages, mostly composed of conical houses, similar to those of the S. African tribes. Six days' march S. of Khartum is Sennaar, the *entrepôt* of the caravan merchandise for Kordofan, Darfur, and Abyssinia. Its environs are wide plains, with a long ragged mountain, about 15 m. W. of the town (Sennaar). The most considerable port upon the Red Sea is Suakim, whence merchants embark their goods for Arabia.

Population and Languages.—The inhab. of the different parts of Nubia differ considerably in personal appearance; and those southward are much darker than those in the states bordering on Egypt. The marked features of the whole race, however, are long, oval countenances, curved noses, somewhat rounded towards the top, rather thick lips, but not so far protruding as those of the negroes, retreating chins, scanty beards, lively dark eyes, strongly frizzled hair, and well-knit, muscular bodies. The Noubas, properly so called, are about the best-looking of the race; both men and women have good features and well-proportioned persons, their disposition and character also being more susceptible of improvement than those of the Dongolese, who are described as dirty, idle, and ferocious. (See DONGOLA.) The people inhabiting the valley of Sheygya, E. of Dongola, are the most powerful of the Nubian tribes N. of Sennaar. They are good horse-soldiers, and were employed as such by Ismael Pacha, on his expedition against the negroes of the S. The common people are almost naked, wearing nothing but a hip-cloth. They usually speak the Arabic language; and the learned caste among them cultivate most branches of Mohammedan literature. The Berbers present,

Digitized by Google

perhaps, the worst specimens of Nubian character: treachery, dishonesty, and drunkenness are prevailing features among the men; and the women, who in the better parts of the country are modest and observant of conjugal fidelity, here indulge in the greatest profligacy, and pay no attention to the marriage vow. The inhab. of Upper Nubia are of Arabic descent, speak the language of the Arabs, and resemble them in their love of a restless roving life. A pastoral pop. inhabits the banks of the Tacazzé, which, also, are visited by mountaineers, when in search of pasturage, during the dry season. The E. desert is infested by wild nomadic tribes, constantly at war with each other, and remarkable for adroitness in thieving and treachery towards strangers.

Industry and Commerce.—The cultivated portions of the Nubian valley being, on account of the height of its banks, beyond the inundation of the Nile, the land can only be watered by artificial means. Even in the lateral valleys, the few canals cut through them are rarely full; and the water, both from them and the Nile, is raised by Persian wheels. Dhourra is reaped in Dec. and Jan.; next follows a crop of barley, and then dhourra again. Tobacco is universally raised. Although the S. districts present some excellent land, agriculture offers few charms for the inhab.; and Sennaar and Shendy are celebrated only for being the *entrepôts* of the chief *commerce* of E. Africa. The town of Shendy, having Soudan and Abyssinia to the S., Egypt and the Arabian Gulf to the N. and E., and Darfur to the W., is the centre of much of the trade with those countries. In Shendy are several forges for iron and silver. The merchants from the W. pay regular visits to Sennaar; they exchange Indian goods for gold, which they transport to Djidda and the E. The price of gold at Sennaar is estimated at 12 dollars an ounce, and at Shendy 16 dollars. Every two months merchant caravans arrive at both these places, frequently consisting of 500 or 600 camels, laden with dhourra; others, comprising about 100 camels, trade in various products, as well as slaves. The traffic in slaves is extensively carried on, upwards of 5,000 being annually imported from the interior of Africa; of these 2,500 are disposed of in Arabia, 1,500 in Egypt, and 1,000 in Dongola and other parts of Lower Nubia. The Arabs of the Desert supply the caravans with senna of the best quality, ostrich feathers, and charcoal.

History and Government.—It has been supposed that the country of the Ethiopians was among the earliest in which advances were made towards civilisation, and that the arts descended from Meroë to Egypt. But there exists little or no authentic information respecting the state of this country in antiquity: it was not till the 6th century that the wandering ancestors of the Nubians appear to have settled under a regular government. At that period mention is made of Silco, king of the Nubates and the Ethiopians, under whom they were converted to Christianity, the country divided into ecclesiastical districts, and the whole subjected to the patriarch of Alexandria. After the loss of Abyssinia, the kings of the Noubas resided at Dongola; but in the 14th century their power ceased, and Nubia was divided into several petty states. In the succeeding century the Mohammedan conquerors reached and subdued the country, Christianity was suppressed, and Mohammedanism took its place.

Down to the year 1821 the people of Nubia were independent, living under their own Meleks, or chiefs; but at that period Ibrahim Pacha reduced them to a dependency on Egypt. This change was so far fortunate for travellers, that with the permission of Mehemet Ali, the whole country became open to their researches. The same system of military despotism and oppressive taxation that exists in Egypt has been extended to Nubia; but it is a question whether the people are now more heavily taxed than formerly by their petty chiefs, while, in other respects, their condition seems improved.

Monumental Remains of Nubia.—Of all the relics of ancient art with which the valley of the Nile abounds over the whole distance from Meroë to Memphis, none have excited more admiration than the excavated temple at Ipsamboûl. It is wholly cut out of the solid rock, and presents a façade, supported by four seated colossi, of exquisite workmanship, and not less than 61 ft. in height. They represent Rameses the Great, and are all portraits, for the faces bear a perfect resemblance to the figures of that king at Memphis, and elsewhere. The interior is not less grand than the entrance: 16 apartments have been enumerated; the first of these is sustained by eight pillars, against which rest the backs of as many figures of Rameses, each 30 ft. in height. The walls of this immense hall are covered with innumerable bas-reliefs on historical subjects, the most striking portraying the conquests of the same prince in Africa. The other apartments afford some curious particulars that supply many conjectures relative to Nubian and Egyptian religious history, which it remains for future students in hieroglyphics to verify. The whole is terminated by a sanctuary, at the back of which are seated five statues, representing Amon, Ra, Phré, Phtah, with the never absent Rameses the Great.

The smaller of the excavations is a temple dedicated to Hathor by Nofre-Ari, wife of Rameses the Great, whose façade has six colossi, each 35 ft. high, carved out of the rock. They represent Rameses and his wife, having at their feet statues of their sons and daughters, all of whom have their names and titles. The front of this temple is free from sand, and access is much easier to its interior than to that of the greater. A passage leads to the pronaos, which is 35 by 31½ ft., supported by six square pillars, three on each side: to this chamber succeeds a vestibule, which leads to the adytum or sanctuary, containing the remains of a sitting statue cut in the rock, which, however, is not in such good preservation as the rest of the structure. The bas-reliefs adorning the sanctuary are painted, the figures yellow, and are enclosed by a border of three colours: the colour of the ceiling is blue.

Archæology is indebted to Burckhardt and Belzoni for bringing these splendid temples to light. The entrance of the great temple is so blocked up with sand, that it is only passable by a person divesting himself of nearly all his clothing, and creeping on his hands and knees; and then the heat within is more intense than that of a Turkish bath, the want of air being almost insufferable.

Besides the excavated temples of Nubia, of which Ipsamboûl does not present the only specimen, there are others, partly hewn out of the solid rock, and partly built. Those of Girshé, Sebona, Dendera, and Gebel-el-Birkel are of this class. The interior of these temples is cut out of the solid rock, while the exterior chambers and appendages are formed of stone work. From the primitive character of the masonry, the rudeness and decay of the sculptures, and the decomposition of the walls, it has been concluded that the temple of Gebel-el-Birkel is older than many of the temples of Egypt, or even of Nubia. This site is also remarkable for 13 pyramids, lying in the desert to the E. of the town, differing from those previously

Digitized by Google

known, their sides presenting small temples with gateways and enclosures. Opposite to Birkel, on the other side of the Nile, at Nouri, is another assemblage of pyramids. The age of all these vast masses of stone, many of them exhibiting little else to the modern traveller than mounds of *débris*, no doubt belongs to the remotest antiquity. At Sammeh and Dendera are specimens of a more perfect class of temples than those before mentioned, and which belong to the last epochs of Nubian art. That at the latter place has the proportions of Grecian structures, and in the pillars have been recognised a mixture of the Greek and Egyptian styles.

The tract of country enclosed by the Nile and the Tacazzé, or Atbara, and terminating at the confluence of these rivers, was the island of Meroë of ancient geographers; and near Assur on the Nile, in the prov. of Shendy, the ruins of the ancient capital of Ethiopia have been recognised. Nothing remains but the Necropolis, which consists of a vast assemblage of pyramids, similar in every respect to those of Birkel. (See Hoskins' Travels in Ethiopia, p. 66 *et seq.*) From the character of these ruins the inference has been drawn that art and civilisation, instead of ascending the Nile from Egypt, descended to it from Ethiopia. The decay in which the mounds of Meroe are now found, produced entirely by the slow hand of time, the sculptures of their interior, exhibiting religious rites of a purer and simpler stamp than those of Egypt, and other circumstances which close observers have detected, seem to prove that they have been the models of the more stupendous Egyptian structures. The excavated temples, too, furnish proofs of the remotest attempts at architecture.

NUDDEA, a district of British India, presid. Bengal, chiefly between lat. 23° and 24° N., and long. 88° and 89° E.; having N. the districts Moorshedabad and Rajeshage, E. Jessore, W. Beerbhoom, Burdwan, and Hooghly, and S. Calcutta and the 24 pergunnahs. Length, N. to S., about 80 m.; average breadth, nearly 40 m. Area, 3,165 sq. m. Its natural features are the same with those of the rest of the delta of the Ganges, by many arms of which it is intersected. The culture of the soil has greatly increased since the establishment of the perpetual settlement. Gang-robbery formerly prevailed to a great extent in Nuddea; but, under the British rule, it has decreased so as to be now of rare occurrence.

NUDDEA, a town of British India, presid. and prov. Bengal, cap. of the above distr., at the commencement of the Hooghly river, 80 m. N. by W. Calcutta. It is the residence of the collector and judge for the district, and was formerly the cap. of a rajahship, and a celebrated seat of Hindoo learning, but it has now fallen into decay.

NUNDYDRORG, a celebrated hill fortress of Hindostan, province Mysore, on a hill 1,700 ft. in height, 100 m. NE. Mysore; lat. 13° 22′ S., long. 77° 44′ E. The hill on which it stands is inaccessible, except on one side: the fort has within it several barracks and magazines, besides a Hindoo temple, in which worship is paid to the bull Nundy, whence the name of the fortress. Nundydrorg was taken by the British in 1791, after an obstinate defence of 3 weeks.

NUNEATON, a market town and par. of England, Atherstone division, hund. Hemlingford, co. Warwick, on the Anker, 8½ m. N. by E. Coventry, 90 m. NW. London by road, and 97 m. by London and North Western railway. Pop. of town 4,645, and of par. 7,666 in 1861. Area of par. 7,020 acres. The town is large and well-built, consisting principally of a long main street, whence another diverges, in which is the market place. The church is a Gothic structure, with a square tower; the living is a vicarage, in crown patronage. There is also a modern-built chapel of ease; and the Wesleyan Methodists, Independents, and Baptists have their respective places of worship. A free school was founded by the inhab. in the reign of Edward VI.; and there is another endowed school, called 'Smith's Charity School,' besides which there are two or three other day schools and Sunday schools. The inhabitants are principally engaged in riband weaving. Floret gauze ribands are the staple article of manufacture; but they are occasionally laid aside for figured satins, sarsenets, and lustrings. Coal is procured in the neighbourhood, where are also some extensive stone quarries.

The government of the town is vested in a permanent constable and 3 others, annually elected at a court-leet. It is one of the polling places at elections for the N. division of the co. Markets on Saturday: fairs, May 14, Feb. 18, and Oct. 31, for horses and cattle.

NUNEZ, or KAKUNDY, a river of Western Africa, Senegambia, after a W. course enters the Atlantic Ocean in lat. 10° 40′ N., long. 14° 40′ W. Its banks are densely wooded, and on them from 70 to 80 m. from the sea are the settlements Walkeria, Cassasez, and Debucko.

NUNIVAK, an island of Russian America, in Behring Sea, off Capes Avinoff and Vancouver; lat. 60° N., long. 165° to 167° W.

NUORO, a town of Italy, island of Sardinia, div. dist., and 78 m. NNE. Cagliari. Pop. 5,162 in 1862. The town has a cathedral, a Jesuits' college, and a brisk trade in cattle and cheese.

NUREMBERG (Germ. *Nürnberg*), a city of Bavaria, circ. Middle Franconia, on the Pegnitz, a tributary of the Regnitz, 93 m. NNW. Munich, on the railway from Bamberg to Augsburg. Pop. 62,800 in 1861. The city stands in a sandy but fertile plain, at an elevation of about 1,000 ft. above the sea; and is divided by the Pegnitz into 2 nearly equal parts, the Sebald-side and the Lawrence-side, each deriving its name from its principal church. Nuremberg covers more ground than any other city of Bavaria, and is, next to the capital, the most populous. It is surrounded by feudal walls and turrets, and these are inclosed by a ditch 100 ft. wide, and 50 ft. deep, lined throughout with masonry. Its arched gates are flanked by four massive cylindrical watch-towers, no longer of use as fortifications, but picturesque in a high degree, and serving to complete the coronet of antique towers which encircle the city as seen from a distance. The stranger arrived within its walls might fancy himself carried back to a distant century, as he treads its irregular streets, and examines its quaint gable-faced houses. Its churches and other public edifices are singularly perfect, having escaped unharmed the storm of war, sieges, and even of the Reformation, which its inhab. adopted at an early period, without any outbreak of fanaticism or iconoclasm. Its private buildings, including the palace-like mansions of its patrician citizens and merchant-nobles, having been built of stone, are equally well preserved, and many are still inhabited by the families whose forefathers originally constructed them. Though built with narrow but highly ornamented fronts, and acutely pointed gables, they are often of large size, inclosing 2 or 3 courts, and extending back from one street to another. The most elevated position within the town, near its N. extremity, is occupied by the *Reichsveste*, or imperial castle, a building of great antiquity and a frequent residence of the German emperors in the middle ages.

Digitized by Google

The 2 principal churches are highly deserving of notice. That of St. Sebald, a fine Gothic edifice, with an elegant choir, built in 1337, has numerous sculptures and carvings by Adam Kraft and V. Stoss, many old paintings and stained glass windows, and the remarkable shrine of St. Sebald. This, which still stands in the centre of the church, though the latter is devoted to the Lutheran service, is the masterpiece of the celebrated artist Peter Vischer, who, with his five sons, was employed on it for 13 years. It is a miniature Gothic chapel, entirely of bronze, consisting of a rich fretwork canopy, supported on pillars, beneath which the relics of the saint repose in an oaken chest, encased with silver plates. The workmanship is most elaborate. The figures of the twelve apostles occupy the niches around the shrine, and are first-rate works of art. Above them are twelve smaller figures of fathers of the church; while about 70 fanciful representations of cupids, mermen, and animals, distributed among flowers and foliage, are scattered over the other parts. The miracles of the saint are the subjects of the bas-reliefs under the coffin. In a niche below at one end is a statue of the artist himself, in a mason's dress, and at the opposite end is a figure of St. Sebald. The church of St. Laurence, founded in 1274, is the largest in the town; and has some very handsome entrances, fine stained glass, and curious carvings; and, above all, a repository for the sacramental wafer, a tapering spire of Gothic open work, 64 ft. in height, executed by A. Kraft, with a minuteness more commonly bestowed on ivory than on stone. The church of St. Giles, erected in 1718, in the Italian style, has a fine altar-piece by Vandyck, various bas-reliefs and escutcheons; the R. Catholic church, finished in 1361, and distinguished for its rich decorations; and the church of the Teutonic knights, begun in 1784, are the other principal ecclesiastical edifices: the Gothic chapel of St. Maurice, constructed in 1313, has been converted into a picture gallery, and filled with rejected paintings from the gallery of Munich. The *Rathhaus*, or town hall, in the Italian style, is one of the most remarkable edifices in the city: it was chiefly built in 1619, but includes the ancient town-hall, dating from 1340. In the latter are the great hall and the council-chamber; the walls of the former apartment being ornamented with several oil-paintings by Albert Durer, and those of the latter having many concealed doors leading to subterranean passages, which extend from the rathhaus under the streets to the town ditch, beyond the walls.

Nuremberg has a gymnasium, founded by the famous reformer Melanchthon, whose statue is placed in its front; an arsenal, barracks, a theatre, many hospitals and asylums, a savings' bank, a charity for distributing food to the poor, and a house of correction. It has also several fountains, some of which are worthy of notice, especially the 'Beautiful Fountain' (*Schöner Brunnen*), in the great market-place; a Gothic obelisk, or spire of open-work, with statues of various historical characters. Among the other remarkable objects in and near the city are the house of Albert Durer, now occupied by a society of artists; St. John's churchyard, in which is Durer's tomb, together with those of many distinguished natives; and a succession of stone pillars between the cemetery and the city, ornamented with curious bas-reliefs. Nuremberg is the seat of a high police court, a civil court of justice, a commercial court of appeal, and a forest board. It has a royal and other high schools, several Latin, and numerous inferior schools, a teachers' seminary, an academy of arts, a polytechnic, and a high commercial academy (*Handlungs Institut*); a number of public libraries, including the city library of 40,000 printed vols., and 800 MSS.; societies of national industry, and medical and natural science, an agricultural union, and collections of every description in the arts and sciences. There are but few pictures by the celebrated native artist A. Durer, but those by other artists are very numerous.

Nuremberg has given birth to many distinguished men, including, among others, the famous painter Albert Durer, born here in 1471. Several important inventions in the arts are said to have been made in this city. The famous machine for drawing wire is supposed to have been constructed by Rudolph, a native of this city. (Beckmann's Hist. of Inventions, ii. 236.) Gun-locks are believed to have been first fabricated here in 1517; and Beckmann says that the circumstance is probable, though he doubts whether the locks were of the present construction (iv. 608). Owing partly to these inventions, but more to the freedom and industry of its inhabs., Nuremberg early rose to great eminence as a manufacturing and commercial town. It was, in fact, the continental Birmingham of the middle ages, during a portion of which period it is believed to have had 100,000 inhabs. Cannon are said to have been cast here as early as 1356, and in the same century it furnished paper and playing-cards. It had, also, a very extensive commerce, being a principal entrepôt for the produce of both the N. and S. of Europe. It still is, and has long been, celebrated for an extensive manufacture of wooden clocks and toys, which it exports to all parts of the world. It also produces various species of metallic goods and jewellery, with telescopes, mirrors, mathematical and musical instruments, sealing wax, and lacquered wares; lead pencils, alabaster, horn, and ivory articles; brushes, woollen yarn, lawn, paper, parchment, brandy and liqueurs. Printing is also carried on to some extent.

Though considerably declined, Nuremberg still ranks as one of the principal commercial cities of Bavaria. The first railroad for locomotives in Germany was completed in 1835–36, between Nuremberg and Fürth, a distance of 4½ m. (See FÜRTH, vol. ii. p. 387.)

Nuremberg, supposed to have been founded in the 9th century, became, in 938, the seat of the first Germanic diet. Until 1417 it had a *burggraf*, or resident governor, appointed by the emperor, and the ancestors of the present royal family of Prussia make their first appearance in history in that capacity. It was subsequently governed much in the same way as Venice, by a merchant-aristocracy, consisting of about thirty families, who appointed the executive officers among themselves. It was at the summit of its prosperity in the 15th and 16th centuries. The famous Æneas Sylvius, afterwards Pope Pius II., who had travelled over the greater part of Europe, celebrates the wealth of this city, and says in his work 'De Morib. Germ.,' published in the 15th century, that the kings of Scotland would wish to be as well lodged as the meanest burgesses of Nuremberg. '*Cuperent tam egregie Scotorum reges quam mediocres Norembergæ cives habitare.*'

Nuremberg early embraced the doctrines of the Reformers, and is celebrated in the history of the Reformation. A diet assembled here in 1524 was of great service to the cause of the Reformers; and here, on the 23d of July, 1532, a treaty was signed, by which full toleration was granted to those professing the new doctrines. The city preserved its privileges as a free town of the empire to the peace of Presburg in 1805, when it was annexed to Bavaria by the emperor Napoleon I.

Digitized by Google

O.

OAKHAM, a market town and par. of England, hund. of same name, co. Rutland, of which it is the cap., 17 m. E. by N. Leicester, 96 m. N. by W. London by road, and 120 m. by Midland railway. Pop. of par. 2,959 in 1861. Area of par. 3,130 acres. The town is tolerably well built. The chief public buildings are the co. hall (forming the only remaining part of a castle built in the reign of William the Conqueror), a fine church with a lofty spire, and a large edifice belonging to the Rutland Agricultural Association. The free school, founded in 1584, and closely connected with that established at Uppingham, is under the control of 14 official governors; it is well endowed, and has 34 exhibitions at Oxford and Cambridge; it has two masters, and the school is open gratuitously to the children of the poor inhabs. A hospital for old men was incorporated with it by Queen Elizabeth, and endowed with alienated church property, now producing above 3,000*l.* a year. Another hospital once existed here, but it has fallen into decay. A boy's national school is established, and there is a well attended Sunday school. Oakham is of very little importance with respect to trade, its chief dependence being on its markets and the retailing of goods for domestic consumption. It is connected by a canal with Melton Mowbray, and has a considerable traffic in coal. The assizes and quarter and petty sessions are held here, and Oakham is the election-town for the co. Markets on Saturday; fairs for cattle and sheep, March 15, second Saturday in April, May 9, Saturday in Whitsun-week, Saturday after Oct. 10, and Dec. 15.

OAKHAMPTON, or OKEHAMPTON, a decayed bor., market town, and par. of England, hund. Lifton, co. Devon, on the Oke, a trib. of the Torridge, and near the N. border of Dartmoor, 20 m. W. Exeter. Area of par. (including the villages of Chissacot, Meldon, and Kegbear), 12,570 acres. Pop. 1,929 in 1861. The town is old and irregularly built. The church stands on rising ground about 1 m. westward, and there is an ancient chantry chapel in the market-place, with places of worship for Wesleyan Methodists and Independents. It has a small endowed free school and two subscription schools, with minor charities for the relief of the aged poor. The bor. was not incorporated till the 21 James I., and having fallen to decay, it was considered too insignificant to be included in the provisions of the Mun. Reform Act. It, however, sent two mems. to the H. of C. from the reign of Charles I. down to the Reform Act, when it was disfranchised. Markets on Saturday; fairs, second Thursday after March 11, May 17, first Wednesday after July 5, Aug. 5, and Saturday after Christmas-day.

OAXACA, or GUAXACA, a city of Mexico, cap. of the prov. of the same name, on the Rio Verde, 205 m. SSE. Mexico, and 160 m. SSW. Vera Cruz; lat 17° 5′ N., long. 97° 8′ W. Estimated pop. 40,000. It is built in the form of a parallelogram, about 2 m. in length, and 1½ m. in breadth, including its suburbs, which are laid out in gardens and planted with nopal trees. The streets, which are broad, straight, and well paved, are lined with good houses of a greenish kind of stone, and on the whole it is the neatest, cleanest, and most regularly built city in Mexico. The public buildings are in general handsome, solidly constructed, and richly decorated; the town-hall, cathedral, and bishop's palace form three sides of the principal square. There are several churches and convents, and numerous fountains are supplied with water conveyed by aqueducts across the valley from the neighbouring hills of St. Felipe. The climate is peculiarly good, the thermometer seldom falling below 63°, or rising higher than 78°; but it is exposed to earthquakes. Oaxaca was founded by Nuno del Mercado, one of the companions of Cortez, and received its name from the trees called *guaxes* that abound in its neighbourhood.

The state of which Oaxaca is the cap. is remarkable for its extreme fertility, and for the richness and variety of its products. The cerealia and the sugar-cane are raised with great facility, and cochineal is extensively cultivated. Considerable attention is likewise paid to the culture of silk. The mineral riches of the state have been very little explored.

OBAN, a parl. bor. and sea-port of Scotland, co. Argyle, on a bay of the same name, in a secluded but beautiful situation, 61½ m. NW. Glasgow. Pop. 1,940 in 1861. The only public buildings are a new church connected with the establishment, and a dissenting chapel. It has no manufactures and no trade, except in such articles as the limited consumption of the place and neighbouring district require. It is visited by the steam-boats between Glasgow and Inverness, and those that ply between either of these places and Staffa and Iona. The harbour is excellent, and the inhab. engage extensively in fishing. The magnificent ruins of the royal palace of Dunstaffnage stand on a promontory 3 m. N. the town. The town had no parl. representative till the passing of the Reform Act, in 1832, which united it with Campbelton, Inverary, Irvine, and Ayr, in sending one mem. to the H. of C. Reg. voters, 110 in 1865.

OBI, a large river of Asiatic Russia, in the governments of Tomsk and Tobolsk, rising by two principal sources on the NW. side of the Little Altai chain near the frontiers of the Chinese empire; lat. 51° N., long. 89° E., flowing first NW. and then N. into the Gulf of Obi, after a course of about 2,700 m.; but if the Irtish, which joins it in lat. 60° 50′ N., and is the longest and widest stream and most direct from the source, be considered the main river, its length will exceed 3,000 m.; the area of its entire basin has been estimated at 1,357,000 sq. m. The Obi, which is the eastern branch, has numerous affluents, the principal of which are the Tom, Tehelim, and Ket, joining it on the E. or right bank. After its junction with the Irtish, it attains a breadth in some places of nearly 20 m. with a depth varying from 2 to 7 fathoms, and has a very rapid current, forming in the lower part of its course numerous islands, and flowing over rocky ledges that greatly impede navigation during the few months that the river is free from ice. The Irtish rises within the Chinese empire, in lat. 47° N., long. 89° 10′ E., on the W. side of the Great

Digitized by Google

Altai chain, and pursues a course nearly WNW. of 240 m. to lake Taigan, through which it flows, and then turns northward for about 100 m., after which it has a general NW. direction, passing Semipolatinsk and Omsk, as far as Tobolsk. Below this point it makes a curve north-eastward of about 300 m., and joins the Obi at Samarova. Both the Obi and Irtish abound with fish, which might be made a lucrative article of trade, as there is a free navigation during the greater part of the year along the Northern Ocean to Archangel.

OCANA, a town of Spain in New Castile, prov. Toledo, 26 m. E. Toledo and 24 m. S. by E. Madrid, on the great road leading from Madrid to Granada. Pop. 5,520 in 1857. Ocana is an ancient town of considerable size, surrounded by ruined walls, situate on the summit and sides of a steep hill. Streets generally narrow and ill-built, but there are two or three squares which give it a tolerably respectable appearance. It has four parish churches, three decayed monasteries, a hospital, cavalry barracks, and a school of primary instruction; but the only object worth notice is the *Fuenta vieja*, a fountain and aqueduct of stone, on 19 arches, supposed to have been constructed by the Romans, which supplies the town with excellent water. Ocana, in the days of its prosperity under the grand masters of the order of St. Jago, established here in the 12th and 13th centuries, carried on a considerable trade in gloves, but its industry at present is confined to the manufacture of hard soap, the tanning of leather, and the weaving of coarse woollen and linen cloths. A festival and fair is held on the 8th Sept. and eight following days, which is much frequented, especially by Jewish traders. During the Peninsular war Ocana was the scene of a disastrous and obstinately contested battle (Nov. 19, 1809), between the Spaniards under Areizaga and the French under Mortier and Victor, which terminated in the total defeat of the former.

ODENSEE, a town of Denmark, isl. Funen, of which it is the cap., on a small river, about 2 m. from the bottom of Stegestrand Bay, a deep gulf to which it has been united by a navigable canal, 88 m. W. by S. Copenhagen, on the railway from Nyborg to Middelfort. Pop. 14,255 in 1860. The town is well built, and has one of the finest cathedrals in Denmark, in which many of the Danish kings are buried, an old episcopal palace, with a library of 6,000 vols., a gymnasium, a church seminary, and a convent with an extensive library of Danish books, the collection of which commenced with the introduction of printing into the kingdom. It is the residence of the governor and of the bishop, and has a patriotic society. Most of the gentry of the island reside here for a part of the year, and the inhabs. are said to be the best educated and informed of his Danish majesty's subjects. It is celebrated for its manufacture of gloves and leather accoutrements: it has also manufactures of cloth, with extensive breweries and distilleries, and soap works. It is the most ancient town of Denmark, and was a place of great note long before Copenhagen was in existence.

ODER, a large and important river of Germany, traversing the centre of the Prussian dom. It rises in Moravia, about 15 m. E. Olmutz, lat. 49° 35′ N., long. 17° 35′ E., at an elevation of 1,800 ft. above the sea. It runs, at first, generally NE. to Oderberg, near which it leaves the Austrian dom.; it thence flows in general NW. to near Oderberg in the Middlemark of Brandenburg, from which point its course is mostly NNE. to the Great Haaff, an inlet of the Baltic, which it enters by numerous mouths near Stettin. In the lower part of its course it forms numerous islands. Its principal tributaries are the two Neisses, the Oppa, Katzbach, and Bober, on its W., and the Malapane, Bartsche, and Netz with the Wartha, on its E. side, the Wartha being by far its most considerable affluent. It is subject to sudden floods, and frequently inundates the plain country through which it flows. It is navigable for small boats as far as Ratibor in Prussian Silesia, and for barges from 40 to 50 tons as high as Breslau. Next to this city, Frankfort, Stettin, Oppein, Glogau, Crossen, Kustrin, and Schweldt are the principal towns on its banks. It is connected with the Havel and Elbe by the Finow canal, with the Spree by Frederick-William's canal, and with the Vistula by means of the canal from Nakel on the Netz to Bromberg. It is of the highest commercial advantage to the country through which it flows. (See PRUSSIA.)

ODESSA, a celebrated city, sea-port, and emporium of S. Russia, gov. of Kherson, on the NW. coast of the Black Sea, about half way between the mouths of the Dniestr and Bug. Pop. 120,375 in 1858. The rise of this emporium has been quite extraordinary, its foundations having been laid, by order of the Empress Catherine, so late as 1792, after the peace of Jassy. It was intended to serve as an entrepôt for the commerce of the Russian dominions on the Black Sea, and has, in a great measure, answered the intention of its founders. It has been said, indeed, that a better locality might have been chosen; and in proof of this, it is stated that there are no springs nor fresh water within 3 m. of the town; that the vicinity is comparatively barren and without wood; and that not being on or near the mouth of any great navigable river, its communications with the interior are difficult and expensive. That these considerations have great weight is clear; but, on the other hand, the situation has the advantage of being central and salubrious: the bay, or roadstead, which is generally open and easy of access, is extensive, the water deep, and the anchorage good; the port, which is artificial, being formed by two moles, is fitted to accommodate above 200 ships, and has a lazaretto on the model of that of Marseilles; and the inconvenience arising from the want of water has been obviated by the cutting of a canal, by which it is conveyed to the town.

The town is well built of soft calcareous stone; but the houses being, for the most part, detached from each other, there are few handsome streets. The warehouses for corn are very extensive. The city is defended towards the sea by some batteries, and on its E. side is a citadel, which commands the town and port. The space, comprising the city and a small surrounding district, to which the franchise of the port extends, is bounded by a rampart. Though it cannot be called a manufacturing town, Odessa has some fabrics of coarse woollen and silk goods, and has extensive tallow refineries, breweries, distilleries, and rope-walks.

Among the public buildings may be specified the church or cathedral of St. Nicholas, with a cupola, the exchange, palace of the governor, theatre, barracks, R. Catholic church, and a hospital. On the quay facing the port, in the centre of the esplanade, is a statue in bronze in honour of the Duc de Richelieu, to whose enlightened administration much of the prosperity of the city is ascribable. Of the various institutions which the city owes to the duke, the lyceum, which bears his name, founded in 1817, is one of the most important. Its organisation has been modified of late years; and at present it is divided into the faculties of philosophy and jurisprudence, and has

Digitized by Google

high schools, two hospitals, two large barracks with a good riding school, a military academy, and theatre. It is the residence of the superintendent of the Calvinist church for Hungary beyond the Danube. The inhabs. refine sugar, weave cotton and woollen goods, manufacture potash, and saltpetre; and trade in wine (grown in the vicinity), corn, tobacco, wax, honey, and cattle, for which it is an extensive market. Numerous Roman antiquities have been discovered in its vicinity.

OELAND, an island of the Baltic, belonging to Sweden, near its SE. extremity, being separated from the prov. of Calmar, in which it is included, by the straits of Calmar, a channel varying from 2 to about 20 m. in breadth. It is long and narrow, extending between lat. 56° 13′ and 57° 22′ N., and long. 16° 20′ and 17° 10′. Area, 300 sq. m. Pop. 33,140 in 1861. The W. shore of the island is low, the E. hilly; in the centre is a plateau, elevated about 150 ft. above the sea, principally of a calcareous or sandy formation. It is principally appropriated to pasturage, only a small portion of the land round the coast being under culture. Fishing and navigation form the principal occupations of the inhabs., who send their fish, butter, and cattle to the mainland, receiving corn and manufactured goods in return. The forests are rather extensive; and the deer, roebuck, and wild boar are pretty abundant. About 300 hands are employed in an alum mine, the produce of which is worth 50,000 dollars a year. Borgholm, on the W. side of the island, is its chief town and seat of commerce. A royal edict of 1820 conferred the freedom to pursue any trade or calling, without authority from any guild or company, on all handicraftsmen settling in this town.

OELS, a town of Prussian Silesia, gov. Breslau, cap. circ., and principality of Oels; on the river of the same name, a tributary of the Oder, 17 m. NE. by E. Breslau. Pop. 7,520 in 1861. The town was formerly fortified, but is now merely enclosed by a lofty wall. It has a large ducal castle, in which are some extensive collections in art and science, several churches and hospitals, a theatre, and numerous public schools and charitable institutions. It has manufactures of woollen and linen fabrics.

OESEL, an island of the Baltic, belonging to Russia, and included in the gov. Livonia or Riga, extending across the mouth of the Gulf of Riga, principally between lat. 58° and 58° 40′ N., and long. 24° 40° and 23° E. Area, estimated at 1,150 sq. m. Pop. including the inhabs. of the adjacent islands of Moen and Runoe, 46,200 in 1858, all Esthonians except some German landed proprietors, and a few Swedes. The coasts are bold; the island is well watered, and its climate is milder than that of the neighbouring continent. The soil is mostly stony, calcareous, or loamy; but with manuring it becomes tolerably fertile, producing wheat, rye, barley, oats, and peas: a considerable extent of the surface is covered with forests. Rearing cattle and fishing are the principal occupations of the inhabs; and the seal fisheries are of some importance. Manufactures quite insignificant. People all Lutherans. Arensburg, on the SE. coast, with about 1,800 inhabs., is a bishop's see, and the centre of the commerce of Oesel.

This island belonged to the Teutonic knights, when their order possessed Livonia; it afterwards belonged to Denmark and Sweden; but it was ceded to Russia with the rest of Livonia in 1721.

OFEN. See BUDA.

OFFENBACH, a town of Central Germany, being the principal manufacturing town of the grand duchy of Hesse Darmstadt, prov. Starkenberg, on the Mayn, 5 m. E. by S. Frankfort, and 17 m. N. by E. Darmstadt, on a branch line of the railway from Frankfort to Darmstadt. Pop. 17,600 in 1864. The town is well built, and has a castle, 4 churches, and a synagogue. Its manufactures consist of silk and cotton stockings; cotton fabrics; carriages, and other vehicles; tobacco and snuff; lacquered iron ware; sealing wax, jewellery, toys, umbrellas and parasols, carpets, and other woollen fabrics. Next to Mayence it has the largest general trade of any town in the grand duchy. Some good wine is grown in its environs.

OHIO, one of the U. States of N. America, being at present by far the most important in the basin of the Mississippi. It is situated between lat. 38° 30′ and 42° N., and long. 80° 28′ and 84° 42′ W., and derives its name from the magnificent river Ohio, which forms the whole of its SE. and S. boundary, separating it from Virginia and Kentucky; on the E. it has Pennsylvania, W. Indiana, and N. Michigan and Lake Erie. Length and breadth, about 200 m. each. Area 39,964 sq. m.; pop. 2,339,502 in 1860. Ohio comprises about one-third part of the country, sloping from the Alleghanies in Pennsylvania down to the Mississippi. It has no very elevated hill ranges, but consists almost wholly of a table land from 600 to 1,000 ft. above the sea, the central portion of the state being the highest. This, also, which is its least fertile portion, is in parts interspersed with swamps and marshes. The declivity towards Lake Erie is much more abrupt than the S. slope of the state, and the country is here also in parts marshy; that portion of the surface which declines towards the Ohio, and is the most extensive, is diversified with hills and valleys; and, on the whole, nine-tenths of the state are susceptible of cultivation, nearly three-fourths being pre-eminently fertile. The hills are generally cultivable to their summits, and the river bottoms are exuberantly productive. In the S. and SE., along the Ohio, the country is broken with abrupt hills. Next to the Ohio, the chief rivers are, its tributaries, the Scioto, Miami, and Mushingum, and the Maunee, Sandusky, and Cuyahoga, tributaries to Lake Erie. The Scioto, traversing the centre of the state, is a fine navigable stream, which has been ascended by boats to near its source, where it is separated by only a few miles from the Sandusky. The Mushingum, rising near the headwaters of the Cuyahoga, is about 200 m. in length, for 75 of which (from the Ohio to Zanesville) it is navigable by small steam vessels, and for 110 m. by batteaux. The Miami is navigable for 75 m., and the Maunee for 18 m.; but most of the rivers flowing N. are greatly interrupted by cataracts. In the tract between the Scioto and Miami, and in some districts along the Ohio, are rich and extensive prairies; but originally the country was almost covered with noble forests of large and valuable trees, and these still remain uncleared in the N. and NW. parts of the state. The geological formations are nearly all secondary, comprising limestone, lias, saliferous, and ferriferous rocks, sandstone, greywacké, &c., in horizontal strata. The soil is generally very productive. In the sheltered valleys of the S. the climate is very mild; but, in the central and N. parts, the cold of winter is considerably more severe than in the states on the Atlantic, in the same latitude; but, upon the whole, it is very healthy.

In 1860 the value of real and personal estate was returned at 1,193,898,422 dollars, being an increase of 689,172,302 dollars, or 136 per cent.

Digitized by Google

over the year 1850. Ohio is rapidly becoming a thickly settled country of moderate-sized freehold properties: in respect of the magnitude of its farms, their general equality in point of size, and the dispersion of the pop. over the whole state, Ohio bears a close similarity to the states of New England. Indian corn, wheat, rye, oats, barley, tobacco, orchard fruits, and kitchen vegetables, are the staple products. On the rich alluvial soils, more than 100 bushels of Indian corn are sometimes produced on an acre, though from 40 to 50 bushels is considered an average crop. The soil is, in general, highly suitable for wheat; and a larger quantity of that grain is raised in this than in any other state of the Union; in consequence, it furnishes large quantities of flour for exportation. Hemp is grown to some extent. Tobacco of the finest quality is raised E. of the Mushingum river. The vine and mulberry have been introduced; and wine and silk will, perhaps, at no very distant period, be added to the products of Ohio. Hogs form one of the staple exports, Cincinnati being the principal pork-market of the union. Large droves of fat cattle are sent every autumn to the markets of the E. and S. The stock of sheep is the largest in any state of the Union, New York and Pennsylvania excepted.

Iron ore is extensively wrought in the E. part of the state, where, also, bituminous coal is found. Salt, lime, and marble are the other chief mineral products. Some of the salt springs on the Mushingum are said to be so rich, as to yield 1 lb. of salt per gallon of brine.

Ohio takes a lead among the W. states in manufacturing industry. Cotton yarn, cotton and woollen stuffs, iron, glass, and cabinet wares, paper, hats, shoes, linseed and castor oils are the principal products. Cincinnati, Zanesville, Steubenville, and Chillicothe are the principal manufacturing towns. Ship and steam-boat building are important branches of industry. The sailing vessels are laden at spring flood, and sent down the rivers to the sea, both vessel and cargo being usually disposed of in the West Indies or some foreign port. A good deal of timber is sawn and cut in this state; and this, with flour, corn, hemp, flax, cattle, beef, pork, tobacco, smoked venison, hams, and spirits, are the principal exports. The N. and E. counties send much agricultural produce to Montreal; and, since the construction of the Ohio and Pennsylvania canals, several of the W. and S. cos. have an active trade with New York and Philadelphia; but by far the greater portion of the foreign trade of Ohio centres in New Orleans.

The great extent of her canals, and other internal communications, render Ohio in this respect a rival to New York. The Ohio canal, completed in 1832, is 307 m. in length, extending from Portsmouth on the Ohio to Cleveland on Lake Erie, directly connecting the basin of the Mississippi with that of the St. Lawrence, and having several navigable lateral feeders to Columbus, Lancaster, Zanesville, &c. The Miami canal, 65 m. in length, from Cincinnati to Dayton, was completed in 1830; and a continuation of the same to meet the Erie and Wabash canal (see INDIANA) is in progress. The Mahoning and Beaver, having a length of 77 m. within the state, and the Sandy and Beaver, are the other chief canals. The railway from Cincinnati to Sandusky on Lake Erie, about 220 m. in length, is the principal work of its kind; but there are numerous other railways in the state, their entire length amounting to near 1,000 m.

Ohio is divided into 73 counties; Cincinnati is by far its most important town, but Columbus is its cap. and seat of gov., and the general assembly meets there annually in Dec. The representatives, 101 in number, are elected once a year; and the 36 senators every two years. The right of suffrage is vested in all white inhabs. of the U. States, above the age of 21, who have resided in the state one year next preceding the election, and who have paid a state or co. tax. The governor is chosen for two years, and has 1,800 doll. a year salary. There are courts of common pleas in each co.; and a supreme court, consisting of 4 judges, who have 3,000 dolls. a year each. The judges are elected for 7 years by a joint ballot of both houses of the general assembly.

In 1790, the pop. of this state was only about 3,000; whereas in 1840, or half a century afterwards, it amounted to 1,519,467, and in 1860, as already stated, to 2,339,502—a rate of increase quite unexampled in any other part of the world, and unequalled except by some of the other states of this valley. This extraordinary increase has been principally brought about by the settlement of immigrants from the E. states, attracted thither by the superior fertility of the soil, but partly also by the influx of immigrants from Europe.

The prevailing religious sects are Presbyterians, Methodists, and Baptists. Education is extensively diffused. Ohio university, at Athens, and Miami university, at Oxford, are the high schools, besides which there are superior colleges at Cincinnati, Gambier, Hudson, New Athens, Granville, and other places. The total public debt of Ohio amounted to 14,141,662 dollars in 1864, including a 'foreign debt' of 13,283,778 dollars, the greater part of it bearing 6 per cent. interest.

This territory was first settled in 1788; in 1800, Indiana was separated from Ohio; and the latter was erected into a state in 1802.

OHIO, a river of the United States. See MISSISIPPI.

OHLAU, a town of Prussian Silesia, gov. Breslau, cap. circ., on the Oder, 17 m. SE. Breslau, on the railway from Breslau to Cracow. Pop. 6,840 in 1861. The town was formerly one of the strongest fortresses of Silesia, but its works were, in great part, demolished after its cession to Frederick the Great in 1741. It has a royal palace, with a gallery of paintings, several Lutheran and Rom. Cath. churches, a hospital, orphan asylum, workhouse, and manufactures of woollen cloth. A good deal of tobacco is grown in its neighbourhood.

OISE, a dép. of France, reg. N., formerly comprised in the Ile de France; between lat. 49° 5′ and 49° 45′ N., and long. 1° 40′ and 3° 10′ E.; having N. the dép. Somme, E. Aisne, S. Seine-et-Marne and Seine-et-Oise, and W. Eure and Seine Inférieure. Length, E. to W., 63 m.; average breadth, about 35 m. Area, 585,506 hectares. Pop. 401,417 in 1861. Surface gently undulating. A range of hills traverses the dép. dividing the basin of the Somme from that of the Seine, but no summit rises to any considerable height. Principal rivers, the Oise, Terrein, and Epte, all of which have a S. direction. The Oise, whence the name of the dép., rises in the Belgian prov. of Hainault, near the frontier of Ardennes; and, after a generally SW. course of about 190 m., through the dépts. Du Nord, Aisne, Oise, and Seine-et-Oise, joins the Seine at Conflans St. Honorien, about 12 m. NW. Paris. It is navigable from Channy in Aisne to its mouth, a distance of 75 m. Some pools and marshes exist in the E. and SE. of the dép. The arable lands of this dép. are estimated to comprise 389,486 hectares; meadows, 29,927 h.; vineyards, 2,601 h.; orchards and gardens, 15,388 h.; forests, 80,578 h.; and heaths and waste, 15,709 h. The number of large properties is greater than

Digitized by Google

in most dépts. Soil principally calcareous, everywhere requiring manure: agriculture is considerably advanced, and is improving. Fallows are decreasing, and agricultural implements are made more effective. More corn is grown than is required for home consumption; it is principally oats and wheat. Peas and beans are raised in large quantities for the Paris markets. Pear and apple orchards are numerous, and a great deal of cider of good quality is made. Some wine is grown, but of indifferent quality. The rearing of cattle is an important branch of rural economy; and the fat calves, known in Paris as *veaux de Pontoise*, are from this dép. The stock of horned cattle, calves, &c. is estimated at about 96,500 head, and that of sheep at 538,000. The latter have been improved by crossing with the Merino, Southdown, and Leicester breeds, and yield annually about 800,000 kilog. wool. Butter and cheese, including the cheese of Songeons, are valuable products. Hogs and poultry are numerous. Mineral products, excepting limestone, are few, and of little importance. Oise is distinguished for its manufacturing industry. Woollen fabrics, especially at Beauvais and Crevecour; table-linen, cotton and hempen cloths, woollen and cotton yarn, cotton stockings, lace, metallic and glass wares, and fans, horn, wooden and ivory articles at Meru, are among the principal goods manufactured. This dép. is divided into four arronds.; chief towns, Beauvais, the cap., Clermont, Compiègne, and Senlis.

OLBERA (an. *Ilipa*, a town of Spain, in Andalusia, prov. Seville, in a mountainous district, 48 m. SE. Seville. Pop. 5,840 in 1857. The town has a par. church, hospital, three decayed convents, and a Moorish castle; the view from the last, over a great extent of mountains, intersected by well wooded valleys. A few oil-mills are established here; but the pop. is almost wholly occupied in rearing hogs for the Seville market.

OLDENBURG (GRAND DUCHY OF), a state of NW. Germany, consisting, exclusive of some portions of country inclosed by the duchy of Holstein, of an oblong-shaped territory, between lat. 52° 30′ and 53° 43′ N., and long. 7° 35′ and 8° 50′ E.; having N. the North Sea, and surrounded on all other sides by the Hanoverian dom., except on a small portion of its E. frontier, where it adjoins the territory of Bremen. Length, N. to S., 80 m.; breadth varying from 10 to nearly 50 m. The area of Oldenburg embraces 2,417 sq. m. with a population, according to the census of Dec. 3, 1861, of 295,242 inhabitants. Of these 191,877 are Lutherans; 1,369 members of the Reformed Church, or Calvinists, 25,916 'United Evangelicals'—these mostly in the separated territory of Birkenfeld, on the left bank of the Rhine—72,939 Roman Catholics, and 1,497 Jews. Exceptionally, the male population is larger than the female, the former amounting to 148,618 and the latter to 146,592 souls. Emigration carried off 2,073 persons in the year 1862. The increase of population amounted to 10,016 in the course of eight years.

The natural features and climate of this duchy are similar to those of the adjacent kingdom of Hanover. It is almost a perfect level, except towards the S., where are some hills, though none rises above 300 or 400 ft. The principal rivers are the Weser, on the NE. boundary, its tributaries the Hunto, Haase, Leda, and Jahde. There are many small lakes, the principal being the Drummersee, in the S. The coast is so low that dykes are necessary, as in Holland and Friesland, to prevent inundations of the sea. Here, and on the banks of the rivers, the soil is alluvial and rich; but in most parts of the grand duchy it is either marshy or sandy; and the country does not produce sufficient corn for home consumption, the deficiency being mostly made up by potatoes and pulse. The industry of the inhab. is, however, principally rural; flax, hemp, hops, and rape-seed, together with cattle, horses, salt beef, butter, and bacon are the chief exports. The horses and cattle are of superior breeds; large flocks of sheep are pastured on the heath lands, but their wool is of inferior quality. In this district, also, a good many bees are kept. Next to tillage and grazing, taking fish, with which the rivers abound, is a chief employment of the pop. Timber, fit for ship-building and carpenter's work, grows in the hilly district in the S. of the duchy, where the forests are estimated to cover an extent of nearly 170 sq. m.; but in other parts the fuel used consists almost wholly of turf, which is very abundant in the marshes. Iron is the only other mineral product of much utility. The spinning of linen yarn, and the domestic weaving of linen and woollen stuffs, are the chief branches of manufacturing industry; but these are pursued only as auxiliary occupations by the agricultural pop. Though the country produces oily seeds and animal fat in considerable quantities, neither candles, soap, nor oil are made to any extent, all being imported from foreign countries, to which the raw materials are sent. Neither is the trade of the grand duchy at all extensive; it has but a small seafaring pop., and its commerce is principally confined to a coasting traffic with the neighbouring countries of Denmark, Hanover, Holland, and Lubeck.

The government is an unlimited monarchy, except in respect to the distribution of the taxes, which is under the control of the landtag, composed of deputies elected, by indirect vote, for three years. For administrative purposes, the grand duchy (exclusive of Birkenfeld) is divided into six circles and twenty-eight districts, each of which has its own judicial courts. The court of chancery, and other high courts of appeal, are in Oldenburg or Jever. Total public revenue, 2,387,231 thalers, or 358,084*l.* in 1862; and expenditure in the same period, 2,386,110 thalers, or 357,916*l.* The public debt amounted, in 1862, to 4,265,300 thalers, or 639,795*l.*

Oldenburg holds the tenth place in the full diet of the Germ. Confed., in which it has one vote; and the fifteenth in the committee, in which it has a vote in conjunction with Anhalt and Schwartzburg. Its contingent to the army of the Confed. consists of 3,740 men. The house of Oldenburg is connected with the reigning families of Denmark and Russia. The duchy was erected into a sovereign state in 1773, but Birkenfeld was not united to it till 1813.

OLDENBURG, a town of NW. Germany, cap. of the above grand duchy, and residence of its sovereign, circle of same name, on the Hunte, a tributary of the Weser, 24 m. WNW. Bremen. Pop. 12,574 in 1861. Oldenburg is fortified, and divided into the old and the new town, the latter being well built. The ducal castle is an imposing building, with a fine park. The chancery-chamber, and other buildings for the use of the government, St. Lambert's church, in which the sovereigns of Oldenburg are interred, some other places of worship, the observatory, and the barracks, are the principal public edifices. It has a gymnasium, a military school, and a ducal library of 24,000 vols. Its manufacturing industry is quite insignificant; but it has some trade in wool and timber.

OLDHAM, a parl. bor., market town, and township of England, par. of Prestwich, hund. Salford, co. Lancaster, near the source of the Irk, and not

Digitized by Google

far from its junction with the Medlock, 6½ m. NE. Manchester, and 192 m. NNW. London by London and North Western railway. Pop. of munic. bor. 72,333, and of parl. bor. 94,344, in 1861. Area of parl. bor. (which includes with Oldham the townships of Chadderton, Crompton, and Royton), 11,180 acres. The town has entirely risen since 1760, when it comprised only about 60 thatched tenements: it now consists of many well-built streets, extending on the side of a hill on the road from Manchester to Leeds; and is well paved, lighted with gas, and well supplied with water. The chief thoroughfare runs from E. to W., and is crossed by two or three others in an opposite direction. The principal edifices are the town-hall, in the Grecian style, a theatre, the 'Terrace Buildings,' comprising a public-room, market-house, a public library, or lyceum, opened in 1856, and a large gas establishment. The parish church is a modern Gothic structure, completed in 1830, at a cost of 22,000*l.*; there are eight other churches, a Roman Catholic chapel, and 17 places of worship belong to different denominations of dissenters, among whom Methodists are the prevailing body. Attached to the churches and chapels are numerous Sunday schools. The town has a small endowed grammar school, and a large blue-coat school, founded, in 1807, by Mr. Henshaw, hat-manufacturer. This school, however, owing to a long Chancery suit respecting the property, which amounted to 40,000*l.*, was not opened till 1833. The school-house is at Oldham-edge, and the establishment supports, clothes, and educates 110 boys. There are likewise 2 large national schools, and several Lancastrian as well as infant schools, wholly, or in part, supported by subscription. The other public institutions consist of 3 benevolent societies, a bible and tract association, subscription library, lyceum (with schools and news-rooms), and 2 mechanics' institutes.

Oldham owes its present importance entirely to the cotton manufacture, of which it was early a considerable seat. In 1785 there were within the chapelry 6 cotton mills; but such and so rapid has been the increase of the manufacture in the interval, that, in 1862, there were upwards of 200 mills, employing about 25,000 hands. Hat-making (once the staple manufacture of Oldham) is also very extensively carried on. Mill machinery is made at the Harford works, employing about 6,000 hands, and nearly 2,500 are engaged in collieries within the chapelry. The beds vary from 3 to 5 ft. in thickness; the coal is of excellent quality, and furnishes the chief supplies for Manchester, Ashton, Rochdale, and other manufacturing towns, with which it is connected by the Oldham and Rochdale canals, which latter also communicates with the Ayr and Calder Navigation. The affairs of the township are regulated by commissioners, according to an act passed in 1826. Petty sessions are held twice a week. The Reform Act conferred on Oldham, for the first time, the privileges of returning 2 mems. to the H. of C. The electoral limits comprise with the township three out-townships, as above-mentioned. Registered electors, 1,667 in 1865. Markets on Saturday: fairs, May 2, July 8, and first Wednesday after October 12.

OLERON (ISLE OF), an island off the W. coast of France, dép. Charente-Inférieure, opposite the mouth of the Charente, lat. 46° N., long. 0° 20' W., 7 m. S. the Isle of Ré, and 2 m. from the nearest point of the continent. Area, 99 sq. m. Pop. 18,178 in 1861. The island is tolerably fertile, producing various kinds of corn, timber, red and white wines (a portion of which is converted into brandy), and considerable quantities of salt, from salt-pans along the coast. Château d'Oleron, the cap., on its SE. side, is a fortified town, with a pop. of 3,518 in 1861.

OLIVA, a town of Spain, prov. Valencia, 39 m. SSE. Valencia, and 218 m. SE. Madrid, built amphitheatre-wise on the side of a hill, 1½ m. from the Mediterranean, in a well watered and productive district. Pop. 6,984 in 1857. Its chief public buildings are 2 churches, one of which has a collegiate establishment, a hospital, ancient palace, and 2 prisons. Its manufactures are confined to hemp and linen fabrics. In the neighbouring river Molinet are found fine eels and leeches, the latter of which are exported in considerable quantities to France.

OLIVENZA, a town of Spain, prov. Estremadura, close to the frontiers of Portugal, and about 6 m. from the left bank of the Guadiana, 14 m. SSW. Badajos, and 211 m. WSW. Madrid. Pop. 5,917 in 1857. The town is surrounded with walls and strongly fortified; it has 7 par. churches, 7 convents (now applied to secular uses), 3 hospitals, and a poor-house. The surrounding country, though very imperfectly cultivated, produces abundant crops of wheat, barley, and other grain, with pulse and wine; and the town is much resorted to by traders from Alemtejo, who come to exchange manufactured goods for farm produce.

Olivenza belonged to Portugal till 1801, when it was ceded to Spain, to which it is still attached, notwithstanding the order for its restitution by the Congress of 1815.

OLMÜTZ, a town of Moravia, of which it was formerly the cap., one of the strongest fortresses of the Austrian dom., cap. circ. Olmütz, on the March, 40 m. NE. Brünn, on the railway from Prague to Cracow. Pop. 13,997 in 1857, exclusive of a garrison of 6,000 men. The town is well built, but the loftiness of its buildings darkens the streets. The cathedral is a fine Gothic edifice, in which its founder, Wenceslaus III. of Bohemia, is buried: some of the other churches also deserve notice. The archbishop's palace, deanery, town-hall, theatre, arsenal, barracks, a military hospital, a hospital for lying-in women and orphans, and a large conventual establishment comprise the other chief public buildings. Olmütz is the seat of a university, founded in 1581, and restored in 1827. It possesses a library of about 50,000 printed vols., and many hundred MSS.; it had formerly a rich library of Slavonic literature, but this was carried away by the Swedes, and lost towards the end of last century. The town has also a gymnasium, an episcopal seminary, an academy of nobles, a military school, and numerous inferior schools, and is the residence of the high military authorities, and the seat of the superior judicial courts for the circle. It has some manufactures of woollen, linen, and cotton fabrics, earthenware, leather, and vinegar; and an active transit trade with the neighbouring Austrian provs., Prussia and Poland, especially in cattle.

Olmütz was taken by the Swedes in the 30 years' war, and was besieged unsuccessfully by Frederick the Great in 1758. Lafayette was confined here in 1794.

OLNEY, a market town, and par. of England, co. Buckingham, hund. Newport, on the W. side of the Ouse, 16 m. ENE. Buckingham, and 50 m. NW. London. Pop. of par. 2,347 in 1861. Area of par. 3,140 acres. The town consists of one long street, lined with stone houses. The church is a large Gothic structure, with a spire 185 ft. high, seen from a great distance: the living is a vicarage in the patronage of the Earl of Dartmouth. The Baptists and Independents have their respective places of worship, which, as well as the church, have well-attended Sunday schools. Almshouses

Digitized by Google

for necessitous females are supported at the sole expense of a benevolent Quaker lady. Lace-making was long the chief employment of the inhabs., but it has been for many years declining. More recently silk-weaving and the manufacture of hosiery were attempted on a small scale, but they also have been abandoned.

Olney derives celebrity from its having been for a lengthened period the residence of the poet Cowper: the 'substantial brick-built house' in which he resided still stands near the centre of the town, and the arbour in which he studied is in excellent preservation, and is an object of great attraction. The latter years of the poet's melancholy existence were not, however, passed here, but at East Dereham, in Norfolk. It is rather singular that though the vicarage of Olney be not worth 100*l.* a year, it has been held by some rather distinguished persons, including Moses Brown, Scott, the Biblical commentator, and Newton the friend of Cowper.

OLONETZ, a gov. of European Russia, between the 60th and 65th degs. of N. lat., and the 30th and 42d of E. long.; having N. and NE. the gov. Archangel, SE. and S. Vologda, Novgorod, and Petersburg, and W. Lake Ladoga and Finland. Area (including Lake Onega) estimated at 62,400 sq. m. Pop. 287,354 in 1858. The W. part of this gov. resembles Finland, in being alternately mountainous and marshy, or covered with lakes. Of the latter, Onega is by far the largest. Principal rivers, the Onega, by which the lake Latcha discharges itself into the White Sea, Vodla, Svir, and Suna. For 23 weeks in the year the mean temp. is below 32° Fah., and mercury sometimes freezes. Bleak winds are constant, but the country is tolerably healthy. Soil thin, stony, and not very fertile. Except in the district of Kargopol, into which some improvements have been introduced, agriculture is very backward. The produce of corn is estimated at 269,000 *chetwerts*, a quantity insufficient for the wants of the pop. The peasantry are supported chiefly on turnips, carrots, and other vegetables, of which their bread partly consists, and on the produce of the chase and fisheries. Hemp and flax are grown for exportation, but the principal source of wealth consists in the forests, which are of great extent, those belonging to the crown covering 8,956,795 deciatines. Pasturage is not abundant, and few cattle are reared. Marble, granite, serpentine, and alabaster are found; and there are mines of iron, copper, and even silver, though they are but little wrought. The poverty of the country obliges many of the inhabs. to emigrate annually into the adjacent govs. to take charge of cattle and hew millstones; and in summer the number of absentees is estimated at about a third part of the entire pop. These circumstances are hostile to manufacturing industry; and, exclusive of the imperial cannon foundry at Petrozavodsk, it has only a few tanneries and iron forges. It exports raw produce to Petersburg and Archangel; from which cities, corn, salt, spirits, and colonial and manufactured goods are imported. Olonetz is under the same military jurisdiction as Archangel. Its inhabs. are principally of the Greek church, and subordinate to the archbp. of Novgorod.

OLORON, or OLERON (an. *Iluro*), a town of France, dép. Basses-Pyrénées, cap. arrond., on the summit and declivity of a hill beside the Oleron, across which it communicates with the town of Ste. Marie by a lofty bridge, 13 m. SW. Pau. Pop. 9,362 in 1861. The town has a court of primary jurisdiction, a board of customs, and a chamber of manufactures, with manufactures of woollen cloths, yarn, hosiery, paper, and leather; and an active trade in French and Spanish wool, sheep-skins, *jambons de Bayonne*, and other salted meats, cattle, and timber. It is the general depôt for the timber of the Pyrenees destined for the dockyard of Bayonne.

OLOT, a town of Spain, in Catalonia, near the small river Fluvia, 53 m. NNE. Barcelona, on the railway from Barcelona to Perpignan. Pop. 9,984 in 1857. The town is tolerably well built on level ground, at the foot of a range of volcanic hills, and has several squares and streets adorned with fountains; its public buildings consist of two par. churches, cavalry barracks, and a hospital. It has considerable manufactures of cotton-cloths and woollen caps, with extensive tanneries and soap-factories, and some paper-mills. Well attended markets are held twice a week; and Olot is one of the most thriving towns of Catalonia. Its neighbourhood is peculiarly interesting to geologists, on account of the extinct volcanoes with which it abounds, scattered over a tract measuring about 15 m. from N. to S., and about 6 m. from E. to W. Mr. Lyell, who visited it in 1830, says (Geology, iv. 38–49), 'There are about 14 distinct cones with craters in the vicinity of Olot; and the largest, called Santa Margarita, is 455 ft. deep, and about a mile in circumference. These volcanic rocks also have often a cavernous structure; and at the base of the same hill, adjoining the town, are the mouths of about 12 subterranean caverns, here called *bufadors*. In 1421 the whole of Olot, except a single house, was thrown down by an earthquake; but this calamity may perhaps be ascribed more to the cavernous nature of the subjacent rocks than to the extraordinary violence of the movements on that spot; for Catalonia is beyond the line of those European earthquakes which have within the period of history destroyed towns throughout extensive areas.'

OMER (ST.), a strongly fortified town of France, dép. Pas de Calais, cap. arrond., on the Aa, and at the union of several great roads, 40 m. NW. Arras, and 29 m. E. by N. Boulogne, on the railway from Calais to Lille. Pop. 22,011 in 1861. The town is partly built on a hill, but principally in the low and marshy plain at its foot. The circ. of its ramparts is about 2½ m.; beyond its moats and glacis are several strong and extensive outworks; and from the town being half surrounded by marshes, the greater part of its vicinity may be readily laid under water. Its streets are broad and regular, but being lined generally with mean-looking houses of yellow brick, it has a dull appearance. It is, however, well furnished with public fountains. The cathedral of Notre Dame, an edifice completed towards the middle of the 15th century, is of Gothic architecture, and 373 ft. in length internally. In it are several colossal statues, a fine painting by Rubens, and the tomb of St. Omer. The abbey of St. Bertin, in which the last of the Merovingian kings died, was destroyed during the phrenzy of the Revolution, and only some ruins of its church exist. The college, formerly the Jesuits' church; the military hospital, occupying the building formerly a seminary for the English and Irish Rom. Catholic clergy; the town-hall, arsenal, and powder magazines, several hospitals and prisons, the theatre, and some convents, are the other principal public buildings. The ramparts are planted with elms, and form fine promenades; as do the banks of the canal of Neuf Fossé, which connects St. Omer with Aire, and the Aa with the Lys. It is the seat of a sub-prefecture, and has courts of primary jurisdiction and commerce, a chamber of manufactures, a communal college, and a public library of 16,000 vols. Its manufactures consist of common woollen cloths,

Digitized by Google

woollen yarn, lace, basket-work, fishing-nets, soap, starch, glue, and tobacco-pipes; it has also many distilleries, breweries, paper-mills, and tanneries, and an active trade in corn, wine, oils, flax, and coal. Beyond the walls are 2 suburbs, the inhabs. of which are principally gardeners. Near the town is a lake, on which are some curious floating islands, held together principally by the trees which grow on them, and affording pasturage for sheep and cattle.

This town was originally called Sithiu; it took its present name from St. Omer, who founded its cathedral about 645. It was walled at the end of the 9th century, and was long an object of contention between the Burgundians and French, to whom it finally fell in 1677.

ONATE, a town of Spain, in Biscay, prov. Guipuscoa, 28 m. ESE. Bilbao, and 194 m. NNE. Madrid. Pop. 4,812 in 1857. The town stands on the side of a hill in the valley of its own name, and is well built with regular streets, most of them terminating in a large square, which has a remarkably fine town-hall, a par. church, with a tower 190 ft. high, and a large building with a Doric portico, formerly used as a convent of Jesuits: in the centre of the square is an elaborately ornamented fountain. There are two other par. churches, and several deserted convents, a well supported hospital, and a college of handsome architecture, attended by between 150 and 200 students. Iron is extensively wrought in the neighbouring mountains, and within the town are iron-foundries and nail-factories. The surrounding district is extremely productive, and has numerous mineral springs and quarries of jasper and limestone.

ONEGA (LAKE), a considerable lake of Russia, being, next to that of Ladoga, the largest in Europe, in the centre of the gov. of Olonetz, between lat. 60° 50′ and 62° 50′ N., and long. 34° 20′ and 36° 20′ E. Length, NW. to SE., 130 m.; breadth varying from 30 to 45 m. Area variously estimated at from 3,300 to 4,300 sq. m. It receives numerous rivers, and at its SW. extremity discharges itself into the Lake Ladoga by the Svir. Its shores, which are generally rocky, present several deep bays and gulfs; and there are numerous islands near its N. extremity. Its navigation is impeded by sand-banks, but it is less subject to storms than Lake Ladoga. Principal towns on its banks, Petrozavodsk and Povienetz.

ONTARIO (LAKE), the smallest and most easterly of the five great lakes of N. America, in the St. Laurence basin, partly belonging to Canada, and partly to the state of New York (U. States); between lat. 43° 10′ and 44° N., and the 76th and 80th degs. of W. long. It is of an elongated oval shape; length, W. to E., 172 m.; greatest breadth, about its centre, nearly 60 m. Area, estimated at 5,100 m. Its surface-level is about 334 ft. below that of Lake Erie, and 231 ft. above the tide-level in the St. Laurence. Its depth is said to average 490 ft.; but in some places it is upwards of 600 ft. in depth, and it is navigable throughout its whole extent for vessels of the largest size. The St. Laurence (under the name of the Niagara river), enters it near its SW., and leaves it at its NE. extremity, where it is much encumbered with small islands. Lake Ontario has many good harbours; and as it never freezes, except at the sides, where the water is shallow, its navigation is not interrupted like that of Lake Erie. It is, however, subject to violent storms and heavy swells. Its banks are in general level, and mostly covered with wood, though now variegated with partial and increasing cultivation. Toronto, Kingston, Newcastle, and Niagara, are the principal towns on the British side; and Oswego, Genessee, and Sackett's Harbour, on the American side. This lake receives numerous rivers, including the Trent and Humber on its N., and the Black River and Genessee on its E. and S. shores. It communicates by the last-named river, and by the Oswego canal, with the Erie canal, and consequently with the Hudson and N. York; the Niagara river and the Welland canal, at its SE. extremity, unite it with Lake Erie, and the Rideau canal connects it with the St. Lawrence below Montreal. Numerous sailing vessels and steamers of large size navigate this lake, which is the centre of an extensive commerce.

ONTENIENTE (an. *Fonteniente*), a town of Spain, prov. Valencia, on the Clariano (a trib. of the Jucar), 35 m. N. by W. Alicante, and 47 m. SSW. Valencia. Pop. 7,793 in 1857. The town is tolerably well built, with a fine central square, and several wide though steep streets; its principal public buildings being three par. churches, five decayed convents, a hospital and college now partly in ruins. It is a place of considerable industry, chiefly exerted in weaving linens and woollen fabrics; besides which there are several fulling, corn, oil, and paper-mills. In the neighbourhood is an extensive *huerta*, or irrigated tract, which is very productive. A great fair is held here in November.

OOCH, a town of NW. Hindostan, prov. Mooltan, rajahship of Bhawulpoor, in a fertile plain 4 m. E. the Chenab (an. *Acesines*), where it is joined by the Garra, or united Sutleje and Beas; lat. 29° 11′ N., long. 70° 50′ E. Pop. estimated at 25,000. Ooch is formed of three distinct towns, a few hundred yards apart from each other, and each has been encompassed by a wall of brick, now in ruins. It is a mean place: the streets are narrow and covered with mats as a protection from the sun. It is highly celebrated in the surrounding countries for the tombs of two saints of Bokhara and Bagdad. These are handsome edifices, about 500 years old; but an inundation of the Acesines, some years back, swept away one half of the principal tomb, with a part of the town. Ooch is built on an elevated mound of clay, apparently composed of the debris of former houses, it being a place of high antiquity.

OOJEIN (Hindoo *Ujjayini* or *Avanti*, the *Ozene* of Ptolemy and the Periplus), a city of Central India, prov. Malwah, and the former cap. of Scindia's dom., on the Siprah, a tributary of the Chumbul, 34 m. N. by W. Indore, and 1,698 ft. above the sea; lat. 23° 11′ N., long. 75° 51′ E. It is of an oblong form, about 6 m. in circuit, and fortified with a stone wall and towers. Within this space is some waste ground, but the greater part of the surface is thickly covered with buildings and very populous. The streets are broad, airy, paved, and clean; the houses of brick or wood, and tiled or terraced. Four mosques, some mausoleums, Scindia's palace, an extensive and commodious edifice, but without any claim to magnificence, an ancient Hindoo gate, and some Hindoo pagodas, are the principal public edifices. In a temple to Mahadeo is an extraordinary sculptured image of the bull Nundi. The pop. of Oojein includes a great many Mohammedans, who are actively engaged in trade. The imports are principally fine white cloths, turbans, and dyed goods; European and Chinese produce from Surat; assafœtida from Sinde; cotton, coarse cloths, opium, and other drugs, are exported, and diamonds in transit from Bundlecund to Surat.

Ancient Oojein, which stood about 1 m. northward, was destroyed at an uncertain period by some physical catastrophe. On digging to a

Digitized by Google

depth of 15 or 18 ft. brick walls, stone pillars, and other antiquities have been discovered, frequently in good preservation. Adjoining these subterranean ruins, is what has been called the Cave of Bhirtery, a palace now in great part buried by an accumulation of the surrounding earth, but of which many portions remain entire, including a long gallery, supported by pillars curiously embellished with figures in relief. Elsewhere around Oojein, there are various temples, worthy of notice; and about 4 miles N. is an elegant summer palace, cooled by artificial cascades, built in the sixteenth century, and but little injured by time.

OOSTERHOUT, a town of Holland, prov. N. Brabant, arrond. Breda, cap. canton, 5 m. NE. Breda. Pop. 8,595 in 1861. The town has numerous potteries and brick-kilns, and is the seat of three large annual fairs, at each of which the sale of woollen and linen fabrics and shoes is estimated to amount to 40,000 florins.

OPLADEN, a town of Rhenish Prussia, on the Wipper, reg., and 15 m. SE. Düsseldorf, on the railway from Düsseldorf to Elberfeld. Pop. 1,937 in 1861. The inhabitants are mostly employed in manufactnres of woollen cloth and cutlery.

OPORTO, or PORTO, an important commercial city and sea-port of Portugal, on the N. bank of the Douro, about 2 m. from its mouth, 174 m. N. by E. Lisbon, with which it is connected by railway. Pop. 81,340 in 1858. The town has 4 suburbs, which, with the city itself, cover an area of about 2 sq. m. It is built amphitheatre-wise, partly on the sides and tops of 2 hills, but partly also on a plain near the river, from which it has a strikingly beautiful appearance. A wall, flanked at intervals with towers, encircles the town, which is further protected by a fort; but these fortifications have not been kept in good repair, owing to the city being naturally secure against an attack by sea, and one on the land side not being apprehended. An elevated quay extends the whole length of the town: it has on one side a row of houses, and on the other a strong stone wall, with rings for securing vessels during the heavy swells of the river. It is generally well built, the houses are all white-washed, and though it has many narrow and dirty streets, it is said to be (which, however, is no great recommendation) the cleanest and most agreeable town in Portugal. From the quay rises a broad well-paved street, flagged on both sides, and leading to two cross streets of equally fine proportions; but the streets on the slope of the hill are mostly irregular, contracted, steep, and dirty. At the E. end of the city the houses, which overhang the side of the river, are built on so steep an acclivity as to be accessible only by steps cut out of the rock. On the summit of the hills are several fine broad streets, lined with good houses, with gardens attached, occupied by some of the principal merchants. Oporto has several squares, the largest of which are the *Praça da Constitution* and the *Campo da Corduria*, lined with three rows of trees, and much frequented as a public promenade. There are 9 parish churches, and a great many other churches and chapels. The cathedral, built in 1105, is a large and fine though rather heavy edifice: the church, *dos Clerigos*, has the highest steeple in Portugal, except that of Mafra: the rest exhibit no features worth notice. There are also 17 convents, now unoccupied, or applied to secular uses. The other public edifices comprise a modern-built episcopal palace, a town-hall (*senado da Comarca*), court-house, with attached prisons, royal hospital, *casapia*, or pawnbroking establishment, and a very pretty theatre, with extensive warehouses belonging both to the Oporto company and the British merchants. The English factory is a handsome building, in one of the principal streets, comprising reading-rooms and ball-rooms, and a residence for the British consul. Oporto has several establishments for public instruction, the principal of which are the academy of navigation and commerce, the school of medicine and surgery attached to the hospital *de la Misericordia*, the episcopal seminary, school for foundlings, and 4 colleges, with numerous schools for primary and higher instruction. It has a large tobacco factory, a soap-boiling establishment, with roperies, tanneries, and fabrics of cotton, silk, linen, and wool: besides which there are ship-building yards for the construction and repair of merchant-vessels; but in none of these establishments is there any great display of activity. The harbour within the bar, across the mouth of the Douro, can only be entered, at least by vessels of considerable burden, at high water; and it is rarely practicable at any period of the tide for any vessel drawing more than 16 ft. On the N. side the entrance is the castle of St. Joao de Foz, near which, on high ground, is a light-house, with a fixed light. The ordinary rise of spring tides is from 10 to 12 ft., and of neaps from 6 to 8 ft. The bar being liable, from the action of the tides, and from sudden swellings and *freshes* in the river, to perpetual alterations, should never be attempted by any vessel without a pilot.

The swellings or *freshes*, now alluded to, most commonly occur in spring, and are caused by heavy rains, and the melting of the snow on the mountains. The rise at such times often amounts to 40 ft.; and the rapidity and strength of the current are so great that no dependence can be placed on anchors in the stream. Fortunately, a fresh never occurs without timely warning, and it is then the practice to moor with a cable made fast to stone pillars erected on the quay for that purpose. On the opposite side of the river, but connected by a bridge of boats, are the towns of Gaya and Villanova, which may be considered as suburbs of Oporto. The former of these is said to occupy the site of the ancient Cala: more eastward is Villanova, inhabited chiefly by coopers, porters, and other labourers, employed by the merchants; and between these towns are immense vaults or warehouses for storing wine previously to its shipment.

Commerce.—Owing to her situation on the Douro, which is navigable partly by barges and partly by boats about 100 m. inland, Oporto is the emporium of a large portion of Portugal, and enjoys a pretty extensive commerce. The famous and well-known red wine called Port is produced on the banks of the Douro, about 50 m. above Oporto, and has derived its name from its being exclusively shipped at this city. The exports of port, which is the great article of trade, have varied during the last 10 years from about 20,000 to 40,000 pipes. England is by far the largest consumer of port. The high discriminating duties on French wine, imposed in the reign of William III., originally introduced port into the British markets, and gave it a preference, to which, though an excellent wine, it had no natural claim: this preference first generated and its long continuance has since so confirmed the taste for port among the great bulk of the population, that it bids fair to maintain its ascendancy, as an after-dinner wine, notwithstanding the late great reduction of the duties.

The quantities of wine exported from Oporto to various countries in each of the years 1862 and 1863 were as follows:—

Digitized by Google

Countries to which exported	1862	1865
	Pipes	Pipes
Great Britain	24,832	30,044
British Possessions	1,355	584
Belgium	2	—
Brazil	2,078	2,746
Denmark	190	223
France	20	58
Hanse Towns	560	476
Holland	69	101
Monte Video	15	3
Prussia	2	—
Portuguese Possessions	253	314
Russia	50	68
Spain	1	49
Sweden and Norway	139	79
United States	150	142
Total	29,711	34,905

Next to wine, the chief articles of export are oil, oranges, and other fruits; wool, refined sugar, cream of tartar, shumac, leather, and cork. The imports are sugar, coffee, and other colonial products, principally from Brazil; corn, rice, beef, salt fish, and other articles of provision; cotton and woollen goods, hardware, tin plates from England; and hemp, flax, and deals from the Baltic.

The climate of Oporto is damp and foggy in winter, less from the vicinity of the Atlantic than from its position in the midst of woods and mountains. The cold is severe for the latitude, though it seldom freezes; and in summer, on the other hand, the heat would be intense, if not moderated by winds blowing regularly from the E. in the morning, S. at noon, and W. at night. The soil in the vicinity is not fertile, nor is Oporto supplied with provisions from its own immediate neighbourhood; but there are many beautiful and pleasant gardens, producing, according to their exposure or elevation, the fruits of N. or S. Europe. The neighbouring mountains exhibit many traces of metallic ores; and along the S. bank of the river are veins of copper and beds of coal.

Oporto was occasionally the residence of the ancient earls of Portugal, till Alphonso I., in 1174, wrested Lisbon from the Almoraves, and made it the permanent cap. of his kingdom. The city received many important privileges from John II. at the close of the fifteenth century; but most of them were withdrawn, in consequence of an insurrection of its inhabitants, in 1757. In 1805 it was taken and sacked by the French, who retained it till 1809, when the British crossed the Douro, and compelled them to retreat. It afterwards became, in 1831–32, the scene of an obstinate and long protracted conflict between the late Don Pedro and his brother Miguel. The siege of Oporto lasted upwards of a year, during which a considerable portion of the town was battered down by Don Pedro's artillery, a great deal of property was wantonly destroyed by Miguel's troops, many of the wine stores were blown up, and several of the wealthiest merchants were ruined by the annihilation of all trade.

OPPELN (Slav. *Oppolie*), a town of Prussian Silesia, cap. reg. and circ. Oppeln, on the Oder, 51 m. SE. Breslau, on the railway from Breslau to Cracow. Pop. 10,223 in 1861. The town is walled, and has, in general, lofty and massive houses, with an old Gothic cathedral, several other Rom. Catholic and Protestant churches, various schools, a royal salt magazine, and several good hotels. It is the seat of government for the regency, of a board of taxation, and a municipal tribunal, and has a gymnasium, and a society for the promotion of the public good.

OPPIDO, a town of South Italy, prov. Reggio, cap. cant, on a hill close to Mount Aspremonte, and 14 m. NE. Reggio. Pop. 6,219 in 1862. The old town of Oppido, supposed by Cluverius to occupy the site of the ancient *Mamertium*, was utterly ruined by the great earthquake of 1783. The modern town, which is also a bishop's see, was built in the vicinity of the former.

Oppido is the name of another South Italian town, prov. Potenza, 13 m. NE. Potenza. Pop. 3,537 in 1862.

ORAN, a fortified sea-port town of Algiers, at the bottom of the gulf of the same name, on both sides a small river, 220 m. W. by S. Algiers, lat. 35° 44′ 20″ N., long. 0° 42′ 13″ W. Pop., inc. garrison, 35,307 in 1861. The town is built on the declivity and near the foot of a high hill, which overlooks it from the N. and NW. On this hill are castles which command the town on the one hand, and the *Mers-el-Kebeer*, or Great Port, on the other. The spring which supplies the rivulet rises a short distance from the city. The latter, which flows in a deep winding ravine crossed by two bridges, is sufficiently powerful to turn several mills, and no doubt occasioned the city being built here rather than at its port. Oran was long in the possession of the Spaniards, who held it from 1516 to 1708, and again from 1732 to 1791. During the period of their occupation, they expended vast sums on the fortifications, and adorned it with several fine churches and other buildings. It was, however, a very costly appendage; for, as the dominion of the Spaniards did not extend beyond the walls of the town, everything required for the subsistence of the garrison, consisting generally of from 5,000 to 7,000 men, had to be brought from Spain. In 1790 it suffered very severely from an earthquake; and the Moors, taking advantage of this catastrophe, besieged the town, which was evacuated by the Spaniards in the course of the following year. At the period of its occupation by the French it was in a state of extreme decay; but it has since been greatly improved. The fortifications have been repaired and strengthened; several new streets have been opened; and the place has assumed a cheerful European aspect. It is one of the healthiest situations in the regency.

The port of Oran, at Mers-el-Kebeer, about 5 m. N. from the town, is one of the best on this part of the coast. It is formed by a neck of land which advances about a furlong into the bay, and secures it from the N. and NE. winds. It has deep water, the holding ground is good, and it is capable of accommodating a large fleet. The French have constructed, with great labour, a new military road from Oran to the port; and they have, also, improved and strengthened the castle built for its protection.

ORANGE (an. *Arausio*), a town of France, dep. Vaucluse, cap. arrond., on the Meyne, a tributary of the Rhone, in a fine plain about 5 m. E. the latter river, and 12 m. N. Avignon, on the Paris-Mediterranean railway. Pop. 10,007 in 1861. The town has several parish churches, a Protestant church, a communal college, a hospital, and many good private houses and public fountains; but the widest thoroughfare being only 12 or 13 ft. across, scarcely any vehicles enter its streets; and the road from Lyons to Avignon, instead of passing through, goes round the town. It has manufactures of handkerchiefs, coloured linens called *toiles d'Orange*, serge, and silk twist.

Orange is indebted for its celebrity to its Roman antiquities. The principal of these is a splendid triumphal arch, situated a short way out of the town. It has been conjectured that this structure was erected by Marius; but from its profusion of

Digitized by Google

ornament it would seem to date from a much later period, and is probably not prior to the age of Hadrian. In many of its details it presents more of the Grecian than the Roman style of architecture; but, from the absence of any inscription, its date is wholly conjectural. It is about 6 ft. in length and breadth, and rather more in height. It has three arched passages, the central and largest of which is 28¾ ft. in height. The archways are flanked by fluted Corinthian columns, and the whole structure is completely covered with groups of figures and other sculptured ornaments. This monument was a good deal injured in the middle ages, from having been converted into a fortress; but it is, notwithstanding, in a state of tolerable preservation, and of late years it has been repaired and surrounded by a palisade. Extensive remains of a theatre, and the traces of several other Roman buildings, also exist here.

Orange was long the cap. of a small principality of the same name, that gave the title of Orange to the family which now occupies the thrones of Holland and Nassau. The king of Holland, however, retains merely the title of Prince of Orange, the town and principality having been ceded to Louis XIV. at the peace of Utrecht. The principality, 12 m. in length by 9 m. in breadth, is very productive of wine, oil, saffron, madder, fruits, and aromatic plants: its inhabs. are distinguished by their industrious habits.

OREBRO, or ŒREBRO, a town of Sweden, in the centre of the country, cap. län Orebro, at the W. extremity of the lake Hielmar, 100 m. W. Stockholm, on a branch of the railway from Stockholm to Goteborg. Pop. 8,383 in 1861. The houses of Orebro are built chiefly of wood, not merely of logs clumsily put together, as is the case in Russia, but of logs covered with boards neatly finished. Their exterior planking is invariably painted a deep red colour, with white doors and window frames. The roofs are generally covered with turf, but there are several well-built brick houses stuccoed white. Streets wide and clean, and some of them are paved with granite. In the principal church is a monument in honour of Englehardt. From its central position, Orebro has been sometimes the seat of the Swedish diet. The inhabs. manufacture woollen cloths and stockings, and carry on an active trade with Stockholm by the lake Hjelmar, the canal of Arboga, and the lake Mælar. The town also is an entrepôt for the iron of the interior.

OREGON, a state of the North American Union, at the NW. extremity of the Union, extending between lat. 42° and 49° N., long. 108° 30′ and 124° 40′ W., having S. California, N. the British NW. territory and Utah, E. the Rocky Mountains, W. the Pacific Ocean and Queen Charlotte Sound; the Gulf of Georgia and Fuca Strait separating it from Vancouver Island. Area, 95,274 sq. m. Pop. 52,465 in 1860. By the treaty of 1846, a boundary line was fixed between Great Britain and the United States; that portion S. of lat. 49°, watered by the Lower Columbia, and its tributaries, Lewis and Clark rivers, and the Willamette, being given to the United States, and the country N. of lat. 49°, including the valley of the Upper Columbia, with right of navigating the Columbia from its mouth, and the whole basin of Fraser river to Great Britain. Two mountainous regions, extending from N. to S., separate the whole country into three parallel regions. That nearest the ocean is fertile land; most of the products of the northern United States, except maize, growing there; the hills are covered with forests of immense trees, and prairies are numerous and extensive. The climate is moist. The middle region is drier and less fertile, but well suited for grazing, and large numbers of horses are reared there by the Indians. The inner region, between the Blue and Rocky Mountains, is partly desert. Along the banks of the rivers are several trading stations; the principal are Astoria and Forts Vancouver, Okanagan, and Colville, on the Columbia, and its branches in the United States' territory, and Forts Langley, Alexandria, and George, on the Frazer river, in the British territory. Oregon was organised as a territory in 1848, and was admitted into the Union as a state, Feb. 14, 1859. It sends one mem. to the congress of the United States.

OREL, a central prov. of European Russia, to the S. of Kalouga and Tula. Area, 16,780 sq. m. Pop. 1,532,034 in 1858. Surface undulating; soil, extremely rich and fertile. Principal rivers, Desne, an affluent of the Dniepr; Sosna, an affluent of the Don; and Oka, an affluent of the Wolga. Forests very extensive, occupying nearly a third part of the surface. Agriculture is the principal dependence of the inhabs., and owing to the excellence of the soil, the return, notwithstanding the bad husbandry, is frequently 7, and sometimes 10 times the seed. Horticulture is better understood than in most parts of the empire. Most landowners have their kitchen-gardens and their orchards, in which they raise almost all the culinary vegetables common in Russia, with apples, cherries, pears, and plums. The chase, though a secondary occupation, is very generally followed, especially that of the fox and hare. Birds, especially quails, are very abundant. The breed of domestic quadrupeds is better and more attended to than in the more northerly provinces; the horses, which are very superior, are suitable either for draught or the saddle. The oxen are of large size, and sheep and hogs are both numerous. The inhabs. keep large quantities of bees, honey being generally used as a substitute for sugar. Manufactures, except distilleries, which are numerous and extensive, have made little progress, the country people supplying themselves directly with almost everything of which they make any use. There are, however, some establishments where coarse linen and woollen goods, earthenware, cordage, and soap are produced, and there are some iron works. Agricultural produce, with timber, mats, and iron, constitute the principal articles of export. Articles of foreign produce and manufacture are brought from Moscow.

OREL, a city of European Russia, cap. of the above gov., on the Oka, where it receives the Orlyk; lat. 52° 57′ 58″ N., long. 35° 57′ 15″ E. Pop. 32,100 in 1859. The town stands in the centre of a rich country, on a navigable river, communicating, partly by the aid of canals, with the Baltic on the one hand, and the Black Sea and the Caspian on the other. Orel may be reckoned the entrepôt of the commerce between Russia, Little Russia, and the Crimea, and at the same time the depôt for corn both of its own and the adjacent fertile governments. The principal articles of commerce are corn, hemp, tallow, butter, bristles, leather, wax, honey, cloth, and cattle, which its merchants chiefly buy in the southern provinces. Immense quantities of most of these articles are shipped upon the Oka, partly to be landed at Serpuchof for the consumption of Moscow, and partly to be forwarded to Petersburg. The town has an ecclesiastical seminary, attended by a great number of pupils, and a gymnasium. It has also establishments for the spinning of cotton, manufactures of cloth and coarse linen, with tanneries, distilleries, tallow-melting houses, and rope-works, and is the seat of some important fairs.

Digitized by Google

It is built of wood, and palisadoed, and the inhab. are distinguished for their industry and wealth.

ORENBOURG, a very extensive government of the Russian empire, mostly in Europe, but partly in Asia, lying between the governments of Astrakhan on the W., and that of Tobolsk on the E., and having Persia on the N., and the country of the independent Kirghises on the S. Area estimated at 138,000 sq. m. Pop. 2,036,581 in 1858. It is divided into two unequal portions by the Oural Mountains, and the river Oural has its source and termination in this government. It is also traversed by the Biela and other affluents of the Wolga, and is bounded on the E. by the Emsa. Soil various; in part mountainous, in part arid saline steppes, but the larger portion is decidedly fertile. Forests very extensive. Climate in extremes; being exceedingly hot in summer, and proportionally cold in winter, particularly to the E. of the Oural Mountains. Notwithstanding the backwardness of agriculture, the produce of corn is estimated at about 4,000,000 chetwerts. The principal wealth of the inhabs. consists in their horses, cattle, and sheep; of all which, but especially the first two, they have vast numbers. The river Oural teems with fish, which are taken in great numbers, and furnish the best caviar. Mines important and valuable, yielding some gold, with large quantities of iron and copper, in the working of which many individuals are employed. A manufactory of arms was established in the district of Troitsk, in this government, by workmen from Rhenish Prussia. The salt-mines of Iletsk furnish annually about 500,000 poods, and a large supply is obtained from the salt-lakes. A considerable commerce is carried on with the Kirghises and other people to the S. of Orenbourg, which principally centres in the town of that name.

ORENBOURG, the principal city of the above government, and the residence of the military governor, on the N. bank of the river Oural. Pop. 20,676 in 1859. The town is well built, and regularly fortified. Principal edifices, cathedral and custom-house. In 1825 a school was established here for the special use of the Mohammedans, and the study of their language. The seat of the commerce alluded to in the preceding article is on the southern side of the river, in a vast bazaar erected exclusively for that purpose, and protected by a camp of Cossacks.

ORFORD (formerly *Ore-ford*), a decayed bor., market town, and par. of England, hund. Plomesgate, co. Suffolk, at the confluence of the Alde with the Ore; 16 m. E. by N. Ipswich, and 80 m. NE. London. Area of par. 2,740 acres. Pop. 948 in 1861. It was formerly of much greater importance than at present, having, in 1359, sent 3 ships and 62 men to Edward III. at the siege of Calais. Its decay is attributed to the loss of its port, the sea having receded from this part of the coast. It is now, having lost its privilege of sending 2 mems. to the H. of C., sunk into insignificance; though its large ancient church, decayed town-hall, assembly-house, and fine old castle, attest its former consequence. Its present inhabs. are chiefly supported by the oyster-fisheries in the neighbouring rivers. Orford claims to be a bor. by prescription, but has received several royal charters. Its corporate officers are a mayor, 8 portmen, and 12 capital burgesses; but it was considered too unimportant to be included in the provisions of the Mun. Reform Act. It sent 2 mems. to the H. of C. from the reign of Richard III. down to the Reform Act, by which it was disfranchised. Sudborne Hall, a seat of the Marquis of Hertford, is about 1 m. NE. from the town.

ORIA (an. *Hyria*), a town of South Italy, prov. Lecce, cap. canton, 21 m. E. by N. Taranto. Pop. 6,403 in 1862. The city is romantically situated upon three hills, in the centre of the plains. The castle and cathedral stand boldly on the highest points. Oria is a bishopric, and is very ancient.

ORIHUELA, a city of Spain, prov. Valencia, on both sides the Segura, crossed here by two bridges, 14 m. ENE. Murcia, and 98 m. SSW. Valencia. Pop. 9,933 in 1857. The city is situated at the foot of a ridge of bare rocks, near the head of a very fruitful *vega* or vale, forming a continuation of the *huerta* of Murcia. The streets are broad, but not paved; and there is not a single fountain in the town. Its principal buildings are, a cathedral (with an attached chapter of 5 dignitaries and 17 canons), 5 par. churches, 2 of which are in the suburbs, and 5 dependent churches (*anejos*), 2 hospitals, a foundling asylum, public granary, and cavalry barracks. The inhab. are engaged in agriculture, and the town is a considerable mart for corn and oil. It produces linens and hats, and has numerous tanneries, corn and oil mills, soap-houses, and starch manufactories. A large fair is held in October. The neighbouring huerta, about 17 m. in length by 5 m. in breadth, can scarcely be exceeded in beauty and fertility. According to a modern traveller, 'Even the vale of Murcia yields in this respect to that of Orihuela, because the latter is so abundantly supplied with water as to be independent of rain. The cypress, silver elm, and pomegranate are here seen mingled with the mulberry, orange, and fig; and here, also, the palm, rising in rich clusters, lends novelty as well as beauty to the enchanting scene.' The huerta yields also very plentiful crops of wheat, barley, and canary seed, hemp, flax, and garden vegetables, and is deservedly called the 'garden of Spain.'

Orihuela, the an. *Orgelis*, is supposed to have existed prior even to the Carthaginians, from whom it passed successively to the Romans, Goths, and Moors. In 1057 it was made the cap. of a small kingdom subordinate to the caliphate of Cordova. In 1228 it became annexed to the Moorish kingdom of Murcia, and finally, in 1265, fell by conquest into the hands of James I., king of Aragon.

ORINOCO, a large river of S. America, in Columbia, first described by Humboldt, who explored the greater part of its course in 1800–1802. Its sources lie in about lat. 3° 30′ N., long. 64° W.; it has a circular course running first W., then N., and latterly E., to its embouchure in the Atlantic, opposite to and S. of Trinidad: its length, including windings, is estimated at 1,380 m., being nearly equal to that of the Danube. In lat. 3° 10′ the river runs over a ledge of rocks, forming a cataract called the Raudal de Guahariboes, about 50 m. above the station of Esmeralda, the highest point attained by Humboldt. About 15 m. below this station it is joined on the S., or left bank, by the Cassiquiari river ('two or three times broader than the Seine near the Jardin des Plantes'), which unites with the Rio Negro, an affluent of the Amazon, and thus connects the Orinoco and the latter by a navigable water communication. Its course from this point is WNW. to the junction of the Guaviare, after which it becomes a broad and deep river, flowing N. by E. over a rocky bed, in which are the two large cataracts called the *Raudalls*, or rapids, of Maypures and Atures, joining together an archipelago of islands, which fill the bed of the river for several m., and in some places do not leave a free passage of 20 or 30 ft. for its navigation, though its breadth at this point exceeds 8,000 ft. (Humboldt's Pers. Narr., v. 138.) About 50 m. below these falls the Orinoco receives

Digitized by Google

from the W. bank the waters of one of its principal affluents, the Meta; and about 70 and 120 m. lower still, the large rivers Arauca and Apure. At the junction of the Apure, where the rocky country terminates, the main stream deflects eastwards, and runs E. by N. past Angostura, to the delta at its mouth, the only considerable affluents in this part of its course being the Caura and Carony, joining it from the S. The delta has its apex about 130 m. from the sea: the S., or principal channel, called *Bocca de Navios*, runs eastward into the Atlantic, and is divided for a distance of about 46 m. into two channels, by the island of Imataca, the E. end of which is about 35 m. from Point Barima, at the mouth of the river, in lat. 8° 45′ N., long. 60° W. The N., or smaller, channel divides itself into a number of branches, called *Boccas chicas*, or small mouths: most of them are sufficiently deep for vessels of considerable burden; but they cannot be navigated without the aid of the neighbouring Indians, who alone are acquainted with the deep and safe channels formed in the alluvial soil near the mouth of the river. The greatest distance between the mouths of the Orinoco is estimated by Humboldt at 47 nautical leagues, or 140 m.: two of the northern mouths fall into the Gulf of Paria.

The affluents of the Orinoco are very numerous, many of them contributing an immense volume of water to the principal river. Those on the W. and N. banks, however, are the only rivers available for navigation, except in the lower part of its course, where it receives Caura and Carony. The Guaviare, which is supposed to connect itself with the Rio Negro by a natural channel, in the same way as the latter river is connected with the Orinoco, appears to have a navigable course of more than 200 m. The Meta rises in the Andes, E. of Bogota, and is navigable for about 500 m. The Apure rises in the Andes, by several sources, between the 6th and 8th parallels of N. lat.; and after a course of nearly 500 m., enters a low and swampy district, through which it forms many different channels, in the neighbourhood of which are extensive *llanos*, furnishing very rich pasturage.

The tides of the Orinoco, at the lowest season, in March, are perceptible as far as Angostura, about 280 m. from Pt. Barima; but the rise is not material above the juncture of the Carony, about 160 m. from the mouth. The annual swell of the Orinoco commences in April and ends in September, during which it remains with the vast body of water which it has acquired the five preceding months, and presents an astonishingly grand spectacle. At the distance of 1,300 m. from the ocean, the rise is equal to 13 fathoms. In the beginning of October the water begins to fall, imperceptibly leaving the plains, and exposing in its bed a number of rocks and islands. At the beginning of February it is at its lowest ebb, and continues in this state till the beginning of April. It abounds in fish of various descriptions. Amphibious animals are also found in great numbers on its shores; caymans, or round-mouthed crocodiles, are met with in great abundance throughout the river, and are, not without justice, an object of dread to the natives. Scorpions and mosquitoes are stated, likewise, to be so abundant as to offer the greatest hindrances to European travellers.

ORISSA, a prov. of Hindostan, wholly included in the British presid. of Bengal and Madras, between the 18th and 23rd degs. of N. lat. and the 83rd and 87th of E. long., having N. the provs. Bengal and Bahar, W. Gundwanah, S. the Godavery, and E. the Bay of Bengal. Length, NE. to SW., about 400 m.; average breadth, 70 m. Area, 28,000 sq. m. Orissa Proper is almost wholly included in the British district of Cuttack. The shore of Orissa is in general low and sandy; the interior remains in a very wild state, being composed of rugged hills and uninhabited jungles, pervaded by a pestilential atmosphere. The population consists, for the most part, of castes considered impure by other Hindoos; including Ooreas and other hill tribes, quite distinct in language, features, and manners from the Hindoos of the plains. Principal towns, Cuttack, Juggernauth, and Balasore.

Orissa has been continually subject to foreigners since 1558, when it was conquered by the Afghans. In 1578 it was annexed to the Mogul empire: in 1756 it was transferred to the Mahrattas, and in 1803–4 it was occupied by the British.

ORISTANO, a town of Italy, island of Sardinia, div. Cagliari, cap. prefecture, near the mouth of the Tirsi (an. *Thirsus*), in the Bay of Oristano, on the W. shore of the island, 30 m. NNW. Caghari. Pop. 6,216 in 1862. The town stands in a fertile, but unhealthy plain, and is not fortified. Its steeples and turrets give it a tolerable appearance from the sea; but it is straggling, unpaved, and ill-supplied with water. It has a cathedral, a spacious edifice, with a detached octangular belfry, one of the most striking objects in the town. There are several other churches and convents, a hospital, a Tridentine seminary, and a Piarist college. The Tirsi is crossed here by a bridge of 3 arches.

The Bay of Oristano, the mouth of which is 5 m. across, affords excellent anchorage during the prevalence of winds blowing off shore, but those from the W. throw in a heavy sea. The E. shore of the bay is shoal, but near its N. side vessels anchor in 6 or 7 fathoms water. Many of the inhabs. are occupied in the manufacture of salt and the tunny fishery and some tolerable wine is grown near the town. Oristano was founded about 1070.

ORIZABA, a town of Mexico, province of Vera Cruz, in a valley remarkable for its fertility, 70 m. WSW. Vera Cruz, and 140 m. ESE. Mexico. Pop. between 8,000 and 10,000, including whites and Indians. It is laid out in wide, neat, and well paved streets, though so great is the power of vegetation that grass grows in almost every part of the town. Coarse cloths are made here in small quantities, and there are several tanneries. The valley in which Orizaba is situated is well clothed with forest trees, above which rises the now extinct and snow-covered volcano of Orizaba, to the height of 17,380 ft. above the Atlantic. The neighbourhood produces nearly all the tobacco consumed in Mexico, and within the town is a large government manufactory of that article.

ORKNEY AND SHETLAND ISLANDS, an archipelago off the N. coast of Scotland. These islands, which are most probably the *Thule* of the ancients, lie in two groups to the N. of Scotland, and form between them a county. The Orkneys (*Orcades*), the most southerly group, are separated from the co. of Caithness by the Pentland Frith, about 6 m. in breadth. They are comprised between the parallels of 58° 44′ and 59° 24′ N. lat., and 2° 25′ and 3° 20′ W. long. There are about a dozen principal islands; Pomona, or Mainland, being decidedly the largest. But, including the smaller islands (provincially *holms*) and islets, the total number amounts to 49, of which 22 are uninhabited. They comprise an area of 281,600 acres, and had a pop. of 32,395 in 1861.

The Shetland or Zetland Isles, the most northerly group (perhaps the *Ultima Thule* of the ancients), are separated from the Orkneys by a channel 48 m. across, and lie principally between

Digitized by Google

the parallels of 59° 52′ and 60° 50′ N. lat., and 30° and 1° 40′ W. long. Including islets, they number 117, of which 87 are uninhabited. They are about twice as extensive as the Orkneys, their total area being estimated at 563,200 acres. In 1861 they had a pop. of 31,670.

The aspect of these islands is pretty similar, but the Shetland group is the more wet and barren of the two. They are generally fenced, particularly on the W. side, with high, black, precipitous cliffs, against which the sea, when vexed by storms, dashes with great fury. They are destitute of high mountains; the altitude of Mount Rona, in Shetland, the highest, not exceeding 919 feet. Their general appearance is that of dreary, heathy wastes, interspersed with rocks, varied sometimes with swamps and lakes, and, in a few places, with beds of movable sand. In some parts, however, particularly in Orkney, the land is abundantly fertile, producing good crops of corn and luxuriant herbage. Some of the islets, or holms, appear like gigantic pillars, rising perpendicularly from the sea: these are the resort of vast numbers of seafowl; and, in the breeding season, hunting for eggs and young birds forms one of the principal and most dangerous employments of the natives. Climate similar to that of the outer Hebrides, except that the days are a little longer in summer and shorter in winter. During the latter, the aurora borealis is uncommonly brilliant. The cultivated lands bear but a very small proportion to the others, being supposed not to exceed 25,000 acres in Orkney, and 22,000 in Shetland. Farms generally very small, few having more than 10 acres of arable land, and many not nearly so much. Agriculture is considered, particularly in Shetland, of subordinate importance, and, though a good deal improved, is still very backward. In Shetland most part of the ground is turned over with the spade, but in Orkney ploughs are in general use. Oats and bere or bigg (*Hordeum hexastichon*) are the only white crops cultivated; and, except on a few improved farms, they follow each other alternately as long as the land will bear any thing, which it does for a very long time when well manured with sea-weed. The barley of Orkney is a great deal more abundant, and of a much better quality than could have been anticipated; and, besides supplying the home demand, considerable quantities are exported. Potatoes are cultivated in all the islands, and form an important part of the food of the people. Turnips have also been planted, and have succeeded very well. At present no trees can be made to grow, and hardly a shrub is to be met with, which is the more singular as the trunks of large trees are not unfrequently found imbedded in moss and sand, both in Orkney and Shetland. The hardy, spirited little horses, known by the name of *Shelties*, are bred in Shetland, and are exported in considerable numbers. The stock kept in the islands is estimated at from 10,000 to 12,000: they are never housed, nor receive any food, except what they gather for themselves. Some of them are exceedingly well proportioned, active, and strong for their size. The horses of Orkney are in inferior estimation. Cattle very small, sometimes not weighing more than from 35 to 40 lbs. a quarter: they are shaggy and not well shaped; but they are hardy, feed easily, and, when fattened, their beef is fine and tender. The stock in both groups of islands is supposed to amount to about 45,000 head. The native sheep are of the small dun-faced breed; they yield short wool, which, though generally soft and fine, is sometimes as hairy as that of a goat. Recently the black-faced and Cheviot breeds, and even pure Merinos, have been introduced into Orkney with considerable success. The stock in both groups of islands is believed to exceed 135,000. A small breed of swine is very abundant: they roam at large, and are not a little destructive. Rabbits are abundant in both sets of islands, but particularly in the Orkneys, as many as 36,000 skins having been exported in a single season from the port of Stromness. Fowls are plentiful, and large quantities of eggs are exported from Orkney. The fisheries, however, in Orkney, as well as Shetland, are the chief object of pursuit. The islands are periodically visited by vast shoals of herrings, while the surrounding bays and seas are uniformly well supplied with cod and other species of white fish. Brassay Sound, in Shetland, has always been one of the principal stations of the Dutch herring fishers, but the fishing there is now principally carried on by the islanders. Vessels from British ports bound for the N. whale fishery mostly touch at Orkney or Shetland; and, besides taking on board supplies of provisions, usually complete their crews with seamen belonging to the islands, whom they put on shore on their way back. Rye straw grown in Orkney has been found peculiarly well fitted to serve as a substitute for the straw used in Italian plait; and the manufacture of this straw into plait has been carried on for several years to a considerable extent, and with good success. Kelp, though comparatively unprofitable, continues to be extensively produced. Woollen stockings and gloves, sometimes of extraordinary fineness, are exported from Shetland.

The people of these remote islands being of Scandinavian and not Celtic origin, neither the Gaelic dress nor language has ever prevailed amongst them. All of them now speak English; but, of old, Norse was the prevalent language. The cottages of the poorer ranks are in general miserable hovels, affording accommodation in winter to cows and fowls, as well as to the family. Owing to the scarcity or exhaustion of moss, the want of fuel is in some islands very severely felt. On the whole, however, the inhabitants are decidedly better off than those of the Outer Hebrides, being comparatively industrious, civilised, and well fed. Kirkwall in Orkney, and Lerwick in Shetland—the only towns of consequence in the islands—had, in 1861, the former a population of 2,444; and the latter 3,061. The society in both is good, and the inhabs. hospitable.

Shetland and some parts of Orkney suffer much from the exaction of tithes. They are not only charged upon the produce of the land, but on that of the fisheries; and, being generally farmed, they are rigidly collected, are productive of much irritation, and are a formidable obstacle to improvement. The feu duties, payable to the crown, or rather to its donatory, Lord Zetland, have also contributed materially to check improvement. Marl, though neglected, is common in Orkney. Lead ore also has been met with, and limestone is of frequent occurrence.

The Orkneys are divided into 18, and the Shetlands into 22 parishes. They send 1 mem. to the H. of C. Registered electors in 1865, Orkney, 457; Shetland, 228; making together a constituency of 685. Inhabited houses in both islands, 11,581 in 1861. The old valued rent was 7,050*l*. The new valuation of Orkney for 1864-65 was 54,574*l*., and for Shetland 28,799*l*.

ORLEANS (an. *Genabum*, and afterwards *Aureliani*), a city of France, in the centre of the country, cap. dép. Loiret, on the Loire, 34 m. NE. Blois, and 68 m. SSW. Paris, on the railway from Paris to Bordeaux. Pop. 50,798 in 1861. The environs of the city, though rich and highly cultivated, are less agreeable than the country

Digitized by Google

round Tours or Blois. The city itself has few good streets, but there is one spacious and elegant avenue, terminating in a noble bridge. The great square is also magnificent. The bridge across the Loire, the foundations of which were laid in 1751, is 354 yards in length, and has 9 arches, the central one being 104 ft. in width. On either side the river are spacious quays; and from the bridge, the *Rue Royale*, one of the handsomest streets in France, leads in a direct line to the *Place du Martroy*. In this square is the monument erected to Joan of Arc, consisting of a bronze statue of that heroine, 8 ft. in height, on a marble pedestal, upon the sides of which are 4 bas-reliefs in bronze, representing the principal actions of her life. A few remains of the ancient fortifications of Orleans exist, but their place is now principally occupied with plantations and public walks, one of which is a fine promenade called the *Mail*. In the old parts of the city the houses are chiefly of timber, and the public thoroughfares narrow, dirty, and wretchedly paved; but several new and tolerable streets have been opened of late years, and various improvements are in progress. The cathedral, one of the finest Gothic edifices in France, is in a great measure hidden by the surrounding houses. It was begun in the 13th century: partly destroyed by the Huguenots, but rebuilt by Henry IV. It has a fine western portal, flanked with two towers, built by Louis XV. in the most gorgeous style. At the intersection of the nave and transepts is an elegant spire: the side entrances, the lofty vaults, the high altar, and the carving of some parts of the interior also possess great beauty. Some of the other churches and chapels are handsome; but, though still numerous, several of them have been converted into warehouses. The old town-hall, an edifice of the 15th century, is now appropriated to the museum: in its court-yard is an old tower, serving to support a telegraph. The Palace of Justice, a handsome edifice erected in 1821, the theatre, *abattoir*, prison, large infantry barracks, corn-hall, intendency, and general hospital are the other principal public edifices. There are several private buildings, curious for their Gothic architecture and decorations; the most remarkable of these are the houses of Agnes Sorel and Francis I. The city is surrounded by extensive suburbs, and its vicinity is sprinkled with numerous villas.

Orleans is the seat of a bishopric; of an imperial court for the dépts. Loire-et-cher, Indre-et-Loire, and Loiret; of tribunals of primary jurisdiction and commerce, a court of assize, the forest direction for the basin of the Loire, a *conseil de prud'hommes*, and a chamber of commerce. It has a royal college; an *académie universitaire* (for the 3 dépts. specified above); a society for the promotion of science, *belles-lettres*, and art; a public library of 25,000 vols.; a museum, with an extensive collection of paintings of the French school; cabinets of natural history; a botanic garden; courses of medicine, of drawing, architecture, botany; maternity and Bible societies; schools of mutual instruction, and a departmental assurance company. Its former university, founded in 1512, had, amongst its illustrious students, De Thou, Erasmus, Calvin, and Theodore Beza.

Orleans is well situated for commerce, but its trade is less flourishing than before the Revolution. It has declined, while Havre and Paris have risen as commercial towns. Its manufactures comprise fine woollen cloths, flannels, woollen yarn, hosiery, cotton yarn, refined sugar, vinegar, and wax candles; and, besides its trade in these, Orleans deals extensively in corn, wines, timber, wool, cheese, and colonial produce. It has a large general fair in June, which lasts 15 days, and one in Nov., lasting 8 days.

D'Anville has shown conclusively that Orleans occupies the site of the an. *Genabum*, the emporium of the Cornutes, taken and burned by Cæsar. (Notice de l'Ancienne Gaule, p. 345.) It subsequently rose to great eminence, and was unsuccessfully besieged by Attila and Odoacer. It became the cap. of the first kingdom of Burgundy, under the first race of French kings. Since the time of Philip of Valois, in the 14th century, it has usually given the title of duke to a member of the royal family. It was besieged by the English in 1428-29, who were ultimately obliged, through the efforts of Joan of Arc, to raise the siege and retire. In 1563 it was besieged by the Catholics; and during the progress of this siege the Duke of Guise was assassinated.

ORMSKIRK, a market town and par. of England, hund. W. Derby, co. Lancaster, 11½ NNE. Liverpool, and 180 m. NW. London, on the London and North Western railway. Pop. of town 6,426, and of par. 17,049 in 1861. Area of par., which comprises 6 townships, 29,020 acres. The town is well-built, paved, and lighted with gas, consisting of 4 principal streets, meeting each other at right angles in a large market-place, in which is the town-hall, built in 1779. The church is a large edifice, with a tower and steeple, detached from each other, and standing side by side: the living is a vicarage, in the gift of Earl Derby, lord of the manor. The out-townships have 3 district churches. The Wesleyan Methodists, Independents, and Unitarians have places of worship; and at Scarisbrick is a Rom. Cath. chapel. Attached to the churches and chapels are Sunday schools. A grammar school, endowed in 1614, is supported by an income of about 140*l.*; and there are 3 infant schools. The other charitable institutions consist of Lathom's almshouses and apprentice-fund, 3 benevolent societies, a savings' bank, and a dispensary, opened in 1797. The principal business of the inhab. is in weaving light cottons and silks, silk-winding, hat and rope-making. Within the parish, also, are considerable coal-mines, the produce of which is sent to Liverpool and other places by the Drylin Navigation, and by the Leeds and Liverpool canal, which passes within 3 m. of the town. The local government of Ormskirk is in the county and manorial police; and courts-leets are held by the lord of the manor once a year. Petty sessions, also, are held here, and it is one of the polling-places at elections for the S. division of Lancashire. Markets on Thursday; large cattle-fairs, Whit-Monday and Tuesday, and 10th Sept.

About 3 m. E. Ormskirk is Latham House, once the seat of the Stanleys, earls of Derby, and celebrated for the siege which it sustained under the Countess of Derby in the civil wars of the 17th century: it is now the property of Lord Skelmersdale. A battle was fought near the town in 1644, between the royalists and parliamentarians, when the former were defeated with great loss.

ORMUZ (an. *Ozyris*), an island situated at the mouth of the Persian Gulf, in lat. 27° 12′ N., long. 56° 25′ E., about 12 m. in circ. It resembles, when viewed from the sea, a mass of rocks and shells violently thrown up from the bottom to the surface of the ocean. The fort, which is in tolerable repair, is built on a narrow projecting neck of land; and this, with a wretched suburb, has a pop. of not more than 500 persons. The remains of aqueducts and walls, on a plain near the suburb, mark the seat of the former capital. The harbour is sheltered on three sides by land, and has good anchorage ground. A range of hills intersects the

Digitized by Google

island from E. to W.; and the rocks consist almost entirely of fine crystallised salt, which might be exported in unlimited quantities. The geological formation of the island indicates the former existence of volcanic action, and sulphur, iron, and copper are found in large quantities, though very few attempts have as yet been made to apply these mineral riches to any useful purpose.

This island, at present so inconsiderable, enjoyed formerly great celebrity and importance. It had, owing to its advantageous situation, become, previously to the appearance of the Portuguese in the East, a great emporium, being the centre of the trade of the Persian Gulf, and of the contiguous countries, and possessed great wealth, population, and prosperity. It was taken by Albuquerque, the Portuguese viceroy, in 1515; and was held by the Portuguese till 1622, when it was wrested from them by Shah Abbas, assisted by an English fleet. The booty acquired by the captors on this occasion is said to have amounted to 2 millions sterling. Subsequently the trade of the island was diverted to Gombroon and other places; and this once rich and flourishing emporium gradually fell into a state of decay.

ORNE, a dép. of France, reg. NW., formerly included in the provs. of Normandy and Perche; between lat. 48° 12′ and 48° 48′ N., and long. 1° E. and 1° W., having N. the dépts. Calvados and Eure, E. the latter and Eure-et-Loire, S. Sarthe and Mayenne, and W. Manche. Length, E. to W., 80 m.; breadth variable. Area, 609,729 hectares; pop. 423,350 in 1861. A chain of hills runs E. to W. through this dép., separating the basins of the Orne and Seine from that of the Loire; but its summits do not reach a height of more than from 1,900 to 2,000 ft.: the hills are mostly covered with thick woods. The dép is abundantly watered. Principal rivers, the Orne, Dive, and Vie, running N., and the Sarthe, Mayenne, and Huine, S. The Orne, whence the name of the dép., has its source near Siez, and flows generally N. through the dépts. Orne and Calvados to the English Channel; which it enters, after an entire course of about 90 m., 15 m. below Caen, from which city it is navigable. Small lakes are supposed to occupy 1,300 hectares, and there are numerous marshes. The soil is various, and in several places there are distinct traces of volcanic action. Agriculture is in a backward state. On the small farms, which are extremely numerous, spade husbandry is very general. Except oats, not enough of corn is produced for home consumption, and the deficiency is, in part, made up by potatoes and buckwheat. Hemp and flax are among the principal products; in some cantons beet-root for sugar is grown. Large quantities of cider and perry are made, from a portion of which brandy is distilled. The best horses of Normandy are reared in this dép. Cattle, hogs, and poultry are fattened for the Paris markets, and honey is an important product. The sheep, which are of an inferior breed, are supposed to yield 450,000 kilog. wool a year. Iron mines are wrought in some parts; manganese, building and other stone, and porcelain clay, being the other principal mineral products. Metallic and linen goods are those chiefly manufactured. L'Aigle is celebrated throughout France for its needles and pins, copper and brass wire. The coarse linen cloths made at Mortagne amount annually to about 12,000 pieces, of from 80 to 100 ells each: and Alençon is particularly famous for a fine and highly prized species of lace, termed *points d'Alençon*. Muslins, calicoes, hair cloths, paper, glass, and beet-root sugar are among the other manufactures. Orne is divided into four arrondissements; chief towns, Alençon, the cap., Argentan, Domfront, and Mortagne.

ORONTES (Arab. *El-Aassy*, 'the rebellious'), a river of Asiatic Turkey, in Syria, which rises in a natural rocky basin on the E. side of the mountain chain of Anti-Libanus, near the village of El-Ras, within the pach. of Damascus, about 50 m. N. of that city. It runs NNE. as far as the lake Kadez, through which it flows, and then takes a NNW. direction through the beautiful vale of El-Ghab, as far as lat. 36° 15′, where it receives the waters of lake Antakiah, near the city of that name (the ancient *Antioch*), and then suddenly deflects westward, falling into the Mediterranean, near Soveidia, or *Seleucia*, after a course of about 240 m. At its mouth is a bar, over which there is from 3½ to 9 ft. water during winter. (Geog. Journ., viii. 230.) 'The Orontes, in the winter season, inundates a part of the low grounds, through which it flows in the upper part of its course, thus insulating the villages and cutting off all communication between them, except by boats. In summer the inundation subsides; but the lakes remain half dried up, and give birth to swarms of gnats and flies, which, coupled with the exhalations from the marshes, oblige the inhabitants to retire into the mountains with their cattle, goods, and chattels.' (Robinson's Pal. and Syria, ii. 247.) This river is not navigable; 'and the rapidity of the stream in many parts of its course, its sudden and numerous windings, its frequent shallows, its various bridges, and the many changes to which it is subjected in the vicissitudes of the seasons, appear to be insuperable obstacles to any plan for making it navigable, or for using it to any considerable extent for trading purposes. In fact, the Orontes is scarcely available at all, even for small craft; and to reach Antioch in a steamer would be a work of consummate difficulty, and, when accomplished, by no means worth the trouble and expense incurred.' (Bowring's Stat. of Syria, p. 49.) Its use, therefore, is chiefly confined to the irrigation of the surrounding country, which is effected by means of water-wheels similar to those described in the article HAMAH.

The river abounds with fish, and produces a species of eels much in request with the Greeks; they are salted and sent in every direction to serve during the fasts before Easter. They are said to produce 60,000 piastres a year to the proprietors of the mills at Antioch, in passing through which they are taken. The valley of the Orontes has on several occasions been visited by earthquakes, the last of which, in January, 1837, destroyed several cities, and occasioned the loss of many thousand lives.

ORTHEZ, or ORTHES, a town of France, dép. Basses-Pyrénées, cap. arrond., on the Gave de Pau, 24 m. NW. Pau. Pop. 6,724 in 1861. The town is well laid out and built, but ill supplied with water. It has manufactures of woollen stuffs, brass and iron wire, and copper wares, and an extensive trade in hams of a superior kind, termed *jambons de Bayonne*, goose-feathers, and cattle. It suffered much during the religious wars. One of its governors, a viscount d'Orthez, is famous for being one of the few who refused to carry into effect the orders of the court for the massacre of St. Bartholomew.

Near this town, on the 27th Feb., 1814, the Anglo-Spanish army, under the Duke of Wellington, defeated a French force under Marshal Soult. The action was well contested: the French lost nearly 4,000 men killed, wounded, and prisoners, and the allies 2,300.

ORTONA, a sea-port town of Central Italy, prov. Chieti, cap. canton, on the Adriatic, 11 m.

Digitized by Google

ENE. Chieti. Pop. 11,862 in 1862. Its chief edifices are its cathedral and other churches, convents, &c., and a palace, once the winter residence of Margaret, daughter of the emp. Charles V. It was anciently the principal port and naval arsenal of the Frentani (Strabo, v. 241; Pliny, iii. 11, &c.), and it has still a few remains of antiquity; but its harbour has ceased to exist. Vessels anchor in soft ground about half a league from shore, in from 10 to 15 fathoms water, or nearer if requisite, in less water; but the station is exposed to N. and E. winds, and there are various rocks and shallows.

ORVIETO (an. *Herbanum*), a town of Central Italy, prov. Perugia, close to the junction of the Paglia and Chiane, about 5 m. from their union with the Tiber, 11 m. NE. the Lake of Bolsena, and 59 m. NNW. Rome. Pop. 12,955 in 1862. The town stands on an isolated and scarped tufa rock; and is clean, well built, and embellished with fine palaces. Among the latter are the bishop's palace; the Gualterio, with frescoes by Domenichino and Albano, and the *palazzo* Petrangeli, with paintings by Pietro Perugino. The cathedral, founded in 1290, is a remarkable Gothic edifice, very rich in bas-reliefs, mosaics, paintings, and statuary, with a large and handsome circular window. It has several other churches, a Jesuits' college, and a large well, dug by order of Clement VII., which is shown as a curiosity. Various Etruscan antiquities have been discovered here; and a light white wine is grown near the town, which has acquired greater celebrity than it deserves. The inhab. carry on some trade in cattle, wine, and silk.

OSIMO (an. *Auximum*), a town of Central Italy, prov. Ancona, 8½ m. SSW. the city of that name. Pop. 15,210 in 1862. The town is well built, having a handsome bishop's palace, a cathedral, several churches and convents, and a college. In antiquity this was one of the most important towns of Picenum. It was included among the cities of the Pentapolis, and was taken by Belisarius from the Goths, after an obstinate defence.

OSNABURG (Germ. *Osnabrück*), a town of the kingd. of Hanover, cap. prov. and principality of its own name, on the Hase, a tributary of the Ems, 83 m. W. by S. Hanover, on the railway from Hanover to Emden. Pop. 16,160 in 1861. Osnaburg is walled and divided into the old and new town. The palace, the town-house (in which the treaty of Westphalia was concluded in 1648), the court of justice, and the cathedral (in which some relics supposed to have belonged to Charlemagne are kept), are all good buildings; and there are a great many good-looking private houses, belonging to merchants. There are 2 Lutheran and 2 Rom. Catholic churches, a Lutheran orphan-house, 4 hospitals, a workhouse, a Catholic and a Lutheran gymnasium, and a house of correction. Osnaburg is a place of considerable trade, from being in the centre of a country where great quantities of the linen cloths termed Osnaburgs are made, and which are brought thither for inspection, stamping, and sale. But it is in a great measure indebted for its trade in these fabrics, and in cattle, to its position on the high road between Bremen and the Lower Rhine. It has, also, manufactories of woollen cloths, tobacco, chicory, soap, paper, and leather. No court has been kept up in Osnaburg since the time of Ernest Augustus, father of George I.; but the nobility of the prov. generally reside here; and, without either having a university, or being a royal residence, it is in some degree celebrated for the literature and polish of its inhabs. It is the seat of a R. Catholic bishop; and its civil governor, nominated by the king of Hanover, is called, though without having any ecclesiastical duties to discharge, the prince-bishop of Osnaburg: this dignity was held by the second son of George III.

OSSUNA, a town of Spain, in Andalusia, prov. Seville, 42 m. E. Seville. Pop. 15,130 in 1857. The town is built amphitheatre-wise on the declivity of a lofty hill, on the top of which stands the par. and collegiate church. It has, also, four hospitals and two sets of barracks. The town formerly possessed a university, which attained considerable celebrity in the time of Cervantes; but at the close of last century it was in a state of decay, and was suppressed in 1824. Ossuna is neat and pretty, surrounded by orchards, among which are some fine public walks; but it has an insufficient supply of water. The climate is good except in summer, when, during the prevalence of the *Solano*, or E. wind, the thermometer often rises to 111° Fahr. The inhabs. are principally employed in agriculture, and the neighbourhood has the reputation of being one of the most productive grain districts of Andalusia. It is, also, celebrated for its capers, large quantities of which are pickled and sent to Seville and Cadiz.

OSTEND, a fortified sea-port town of Belgium, prov. W. Flanders, cap. canton, on the shore of the North Sea, 14 m. W. by N. Bruges, 27 m. ENE. Dunkirk, and about 60 m. E. the North Foreland, on the terminus of railways from Antwerp and Brussels. Pop. 17,351 in 1864. The town is neatly and regularly built, and has a lively appearance, the houses being painted of different colours. It is also a favourite watering-place of the Belgians, and is occasionally resorted to by the royal family. It has no public edifice worth notice, except a good bathing-house, with reading-rooms, on the *levée*, a sloping glacis of stone-work, originally erected to serve as a dyke, having on its summit a favourite promenade. Ostend is strongly fortified by ramparts, a broad ditch, and a citadel; but it is ill supplied with water, which is assigned as a reason for its being in parts rather dirty. The interior harbour, which is large and commodious, is bordered by a broad quay; but ships of considerable burden can only enter the port at high water, and in strong off-shore winds it is difficult of access. There are 2 lighthouses which, when brought in line, mark the channel that leads into the port. The exports consist of corn, clover seed, cattle, and other farm produce; and the imports of sugar, coffee, and other colonial products, wines, spices, and English manufactured goods. In the year 1863 there entered the port 1,038 vessels, of a total burthen of 65,068 tons, and there cleared 1,085 vessels, of 69,498 tons burthen. There are daily steamers from Ostend to Calais, as well as to London and other English ports.

The cod and herring fisheries, especially the former, are carried on to a considerable extent from Ostend. Exclusive of its trade, Ostend has some sugar and salt refineries, and sail-cloth, soap, tobacco, and other factories, with rope-walks, building-docks, and distilleries. It is connected by a canal and railroad with Bruges, and by the great Belgian railroad with Antwerp and other cities of the interior. It is the seat of a tribunal and chamber of commerce, and the residence of a military commandant.

During the memorable struggle made by the Dutch to emancipate themselves from the despotism of Old Spain, Ostend sustained one of the most celebrated sieges of which history has preserved any account. It continued from the 4th of July, 1601, to the 28th of September, 1604,

Digitized by Google

when the garrison capitulated, on honourable terms, to the ablest of the Spanish leaders, the famous Marquis of Spinola. This siege is supposed to have cost the contending parties the lives of nearly 100,000 men.

OSTERODE, a town of Central Germany, kingd. of Hanover, princip. Grubenhagen, on the Söse, a tributary of the Leine, at the foot of the Harz, 49 m. SSE. Hanover, on the railway from Hanover to Leipzig. Pop. 3,515 in 1861. The town is walled, and has several churches, a hospital, and a gymnasium: its principal public edifices are the royal granaries, which supply about 56,000 scheffel of corn annually to the miners and other labourers of the Harz. Osterode has manufactures of woollen and cotton goods, table linens and long cloths, hats, tobacco, soap, white lead, copper and wooden articles, with breweries, distilleries, and tanneries.

OSTIA, a decayed town and sea-port of Italy, on the left or S. arm of the Tiber, a little below where it divides into two branches to inclose the Isola Sacra, about 3 m. from its mouth, and 15 m. WSW. Rome. Pop. 1,200 in 1862. The town, which is now all but uninhabitable from malaria, was in antiquity a flourishing emporium. It was for a lengthened period the sea-port of Rome; and was founded by Ancus Martius with that view, who is, also, said to have constructed the salt-works in its vicinity.—'*In ore Tiberis Ostia urbs condita, salinæ circa factæ.*' (Livius in Anco, lib. i. cap. 33.) In the course of time Ostia rose, with the rise of Rome, to be a place of great wealth, population, and importance. It was taken by Marius, who appears to have treated it with great severity. (Livii Epit., lib. lxxix.) But it soon recovered from this disaster, and continued for a lengthened period to engross the whole trade of Rome carried on by sea. But its port had never been good; and, owing to the gradual accumulation of mud and other deposits brought down by the river, it ultimately became inaccessible to ships of considerable burden, who were obliged to anchor on the coast in an exposed and hazardous situation. Many efforts were made at different periods to obviate these inconveniences, but apparently without much success; and at length the emperor Claudius determined to construct a new port (*Portus*) at the mouth of the N. or right arm of the Tiber. This harbour was wholly artificial, and was formed at a vast expense by moles projecting into the sea. (Sueton. in Claud., cap. 20; Dio Cassius, lib. lx.) The port constructed by Claudius was repaired by Trajan; but the same circumstances that had destroyed the harbour of Ostia very soon began to choke up the new port; and instead of attempting to improve the latter, Trajan judged it more expedient to construct a totally new harbour at *Centumcellæ*, now Civita Vecchia, though the latter was more than double the distance of the former from Rome. (Plinii Epist., lib. vi. ep. 31, and art. Civita Vecchia in this work.) The harbour formed by Trajan is at this moment the best by far on the W. coast of Central Italy. The great works, the construction of which is described by Pliny, still remain entire, and evince the superior discernment and power of its illustrious founder. The port of Claudius, as well as Ostia itself, is now at a considerable distance from the sea; and its harbour, which, according to Bergier (Hist. des Grands Chemins, ii. 356), could not have been executed by any European monarch, is a shallow, noisome pool:—

'Tantum ævi longinqua valet mutare vetustas.'

OSTUNI, a town of South Italy, prov. Lecce, cap. canton, on the brow of a steep hill, 21 m. WNW. Brindisi. Pop. 14,769 in 1862. Ostuni is a bishop's see, but remarkable for little more than the number of its churches and convents. Its climate is said to be highly salubrious.

OSWEGO, a town and port of entry of the U. States of N. America, state of New York, cap. co. of its own name, on the S. shore of Lake Ontario, at the mouth of the Oswego river and canal, which connect the lake with the Erie canal, 330 m. NW. New York. Pop. 16,800 in 1860. The town stands on both sides the Oswego river, here crossed by a wooden bridge 700 ft. in length, and is laid out in streets 100 ft. wide, running at right angles. The court-house, the Oswego hotel, various churches, an incorporated academy, two banks, and a light-house, are the principal public buildings: it has also several large grist and saw-mills, tanneries, cotton factories, and iron works. The harbour is formed by two piers, one 1,219, and one 250 ft. in length, projecting from each side, the opening between them being 250 ft. in width. Within the piers are from 10 to 20 ft. water. The harbour is protected by a large pentagonal fortress and some smaller forts.

Oswego has a wet basin and slips for the repair of large vessels; and is, next to Sackett's Harbour, the best port on the American side of Lake Ontario. Its situation necessarily renders it a considerable emporium, and it already commands a large portion of the trade between the state of New York and Upper Canada.

OSWESTRY (corrupted from *Oswaldstree*), a municipal bor. and par. of England, hund. of its own name, co. Salop, on the borders of Wales, 16 m. NW. Shrewsbury, and 191 m. NW. London by Great Western railway. Pop. of bor. 5,414 in 1861. The town, which was formerly surrounded with walls, is well-paved and lighted; its chief public buildings are a town-hall, prison, theatre, and a fine old church, remarkable for its lofty ivy-mantled tower. The living is a vicarage, in the gift of Lord Clive. The Independents, Baptists, Wesleyan Methodists, Welsh Calvinists, and Primitive Methodists have their respective places of worship, to which are attached Sunday schools, furnishing religious instruction to upwards of 700 children. A grammar school has been established here, and is free for all boys born in the parish to be instructed in grammatical learning in the English, Latin, and Greek languages. Oswestry, which from 1461 to 1621 was the great mart for woollens called Welsh webs, has still a few manufactures of flannel and coarse linen cloth; but its principal dependence is on its retail trade with an extensive agricultural district. The bor., which received its first charter in 22 Richard I., is divided, under the Mun. Reform Act, into 2 wards, and the corporation consists of a mayor, 5 other aldermen, and 18 councillors. Quarter and petty sessions are held under a recorder, and there is a court for the recovery of small debts. Oswestry is one of the polling-places at elections for the N. division of Salop. Races are held near the town in September. Markets on Wednesday: large cattle fairs, 15th March, 12th May, Wednesday before 24th June, 15th Aug., and 10th Dec.

Oswaldstree (more anciently called Maserfield) is supposed to have derived its name from Oswald, king of Northumbria, killed here in 642, and subsequently canonised. It was surrounded by walls by Edward II., in 1277, and became highly important as one of the keys to the principality of Wales. At the W. end of the town, on a lofty hill, are some remains of its castle, supposed to have been built about the time of the Norman conquest.

Digitized by Google

OTAHEITE. See Polynesia.

OTLEY, a manufacturing and market town, par., and township of England, W. riding co. York, upper div. wap. Skyrack, on the Wharfe, 9½ m. NW. Leeds, on the Leeds and Thirsk railway. Pop. of town 4,458, and of par. 13,040 in 1861. Area of par., comprising 12 townships, 23,060 acres. The town, though small, is well-built, and delightfully situated in a picturesque river valley. The church is large, but has few remains of its original architecture. There are places of worship for Independents, Wesleyan and Primitive Methodists, with attached Sunday schools. A grammar school was founded here in 1611, and there is a national school for children of both sexes. Otley formerly enjoyed a considerable share in the woollen trade; but it has long since been removed to situations nearer to the coal districts, and better placed for inland navigation. Within the par., however, are cotton-mills, woollen-mills, and worsted-mills, chiefly in the townships of Grisley, Yeadon, and Rawden. Tanning and malting are carried on in the town to a considerable extent, and it has large markets and fairs for corn and cattle, besides an agricultural show held in April. The archbishop of York is lord of the manor, and holds courts-baron for the recovery of small debts. Petty and quarter sessions are held by the magistrates under the archbishop's commission. Markets on Friday: cattle fairs, Wednesday in Easter week, and every fortnight after till Whit-Sunday, and then every 3 weeks till 1st Aug.

OTRANTO (an. *Hydruntum*), a sea-port town of South Italy, near its SE. extremity, prov. of its own name, cap. canton, on the Strait of Otranto, close to the point of Italy nearest to the Greek peninsula, 24 m. SE. Lecce, and 44 m. WSW. Cape Linguetta, in Albania. Pop. 1,833 in 1862. The town possesses the celebrated 'Castle of Otranto,' with the name of which every lover of romance is familiar. The castle, however, is far from realising the expectations created by the perusal of the work bearing its appellation. It is now, what it ever was, the citadel of the town, a fort of no considerable extent or power, but not entirely deficient in picturesque beauty, especially on the land side. Two large circular towers rise from the rich foliage of the trees which fill the town ditch, and among which a very high palm is conspicuous. The castle, which comprises prisons, stables, a mill, and a chapel, was built by Alphonso of Aragon, who otherwise fortified the town, as a bulwark against the Turks. Otranto has a very ancient cathedral, in which are some columns taken from a temple of Minerva in the vicinity; an archbishop's palace, and a few Roman antiquities. In 1480 it was taken and sacked by the Turks. Under Napoleon I. it gave the title of duke to Fouché.

OTTAJANO, a town of South Italy, prov. Naples, at the E. foot of Mount Vesuvius, 12 m. E. Naples. Pop. 20,397 in 1862. The town has 3 churches, a castle, and some other public buildings. Its inhabs. are principally engaged in agriculture, having but little taste for commerce. Several antiquities found here are supposed to have formed part of a palace anciently belonging to the Octavian family, from whom the town is conjectured to have derived its name.

OTTERY ST. MARY, a market town and par. of England, co. Devon, hund. its own name, on the Otter (whence it derives its name), 11½ m. E. by N. Exeter. Area of par. 9,470 acres. Pop. of par. 4,340 in 1861. The town is large, but irregularly built, containing many vestiges of antiquity, among which is a house formerly inhabited by Sir Walter Raleigh. The church is a large and curious structure, built like Exeter cathedral, with 2 towers opening into the body of the church, and serving as transepts; a ladye-chapel occupies the E. end, and in the interior is a fine arched monument. The Independents and Wesleyan Methodists have places of worship, with attached Sunday schools. A grammar school was founded here by Henry VIII. Two day schools are supported by subscription, and an infant school is attended by about 60 children. Almshouses are established here, and there are numerous minor charities for the relief of the poor within the par. Ottery St. Mary, which had formerly a considerable share in the manufacture of serges and coarse woollen cloths, is now chiefly supported by agriculture and retail trade. Petty sessions for the hund. are held here. Markets on Tuesday; fairs, Tuesday before Palm Sunday, Whit-Tuesday, and Aug. 5, for cattle and sheep.

OUDE (*Ayodhya*), a prov. and former kingdom of British India, between the 26th and 28th degs. of N. lat., and the 79th and 83d of E. long. It has N. Nepaul, but is everywhere else surrounded by the territories of the Bengal and Agra presids., having W. the provs. Delhi and Agra, S. Allahabad, and E. Bahar. Area estimated at about 25,300 sq. m. The country is an extended plain, bounded northward by the lower Himalaya ranges, and W. and S. by the Ganges, being well-watered by several tributaries of the latter. When properly cultivated, the soil is extremely productive, yielding crops of wheat, barley, rice, and other grains, sugar, indigo, opium, and all the richest crops raised in India. From Lucknow to Sandee the country is populous and well cultivated. But Oude was for a lengthened period so wretchedly mismanaged by its native authorities, that, from being one of the richest states of Hindostan, it had become one of the poorest and most miserable, being especially distinguished for anarchy and disorder. Large tracts of the country are in jaghire, or feudally conferred for military service; the zemindars formerly yielded only a very imperfect obedience. In its northern and eastern parts, much of the prov. is a dense marshy forest, exposed to a deadly malaria. Husbandry insufficiently conducted. Oxen are exclusively used for agricultural purposes, a pair averaging in price from 10 to 20 rupees. Domestic animals are cattle, sheep, and goats. Manufactures consist of cotton cloths, coarse woollen blankets, paper, glass-wares, gunpowder, firearms, and other warlike weapons, and extracting soda, saltpetre, and culinary salt, by washing the soils in which they are found, and evaporating the saturated liquids. Exports salt and saltpetre. Imports iron, soap, spices, dye-stuffs, drugs, gems, and European wares. Commercial transactions are conducted at fairs held at the principal marts. In the southern districts of Oude, the climate is salubrious, and longevity is common. During the greater part of the year throughout Oude, the climate is dry, and subject to great extremes of heat and cold, the thermometer at times rising to 112°, and again sinking to 28° Fahr. Winter, from November, till February, is pleasant and healthy, but chilly; from March till June the hot season, with westerly winds, loaded with a light greyish sand, is sultry, hot, and dry; or at times an east wind brings noxious vapours from the swamps of Bengal or Assam. The mornings and evenings of this season are generally cool and pleasant. The rain fall is varied and uncertain in quantity, at one time commencing in the middle of June and continuing till October, at other times continuing only two months; some years 30 inches fall, and

Digitized by Google

in other years 80 inches. The zoology comprises, the tiger, wolf, hyæna, flying-fox, reptiles, birds, and insects of many kinds. The botany is rich and varied.

The kingdom of Oude came under British protection in the year 1765, and in 1856 was formally annexed to the British provinces in India. The annexation caused much discontent among the population, and gave rise, to some extent, to the great Indian mutiny, a large proportion of the Sepoys of Bengal being natives of Oude.

OUDE, a town of Hindostan, in the above prov. and kingdom, of which it was the former cap.; on the Goggra, 74 m. E. Lucknow; lat. 26° 48′ N., long. 82° 4′ E. The town extends for a considerable distance along the banks of the river, stretching as far as Fyzabad. It is said to be tolerably populous; but, except along the river's brink, consists wholly of ruins and jungle, among which are the remains of various celebrated Hindoo temples. Hindoo pilgrims still visit Oude; and did so in greater numbers, until Aurungzebe demolished most of their places of resort. A mosque erected by that monarch, and 2 tombs, greatly venerated by Mohammedans, are now the principal and almost sole remaining public edifices.

OUDENARD, or AUDENARD, a town of Belgium, prov. E. Flanders, cap. arrond. on the Scheldt, 14 m. SSW. Ghent. Pop. 8,540 in 1864. The town is generally well built, and has one of the handsomest town halls in the Netherlands, several churches, a hospital, 2 orphan asylums, a convent, a college, and other schools, including one for spinning yarn. It has some manufactures of cotton and woollen fabrics, with breweries and tanneries.

On the 11th of July, 1708, a powerful French army, commanded by the dukes of Burgundy and Vendôme, was defeated in the vicinity of this town, and obliged to make a disorderly retreat, by the allied army under the Duke of Marlborough and Prince Eugene.

OUNDLE, a market town and par. of England, co. Northampton, and hund. Polebrook, on the Nen, 25 m. NE. Northampton, 67 m. N. by W. London by road, and 97 m. by London and North Western railway. Pop. of town, 2,450, and of par. 3,217 in 1861. Area of par. 5,300 acres. The town, though small, is neat and well built, having a good market-house. The church is large and handsome, with a square tower, having octagonal turrets at the angles, and surmounted by a lofty spire. A grammar school, established in 1544, is attended by about 60 boys. Two charity schools furnish clothing and instruction to 42 boys, and a national school is attended by about 130 children of both sexes. There are also two almshouses. Petty sessions for the hund. are held here once a fortnight. Markets on Thursday; fairs, Feb. 25, Whit-Monday, Aug. 21, and Oct. 12.

OURAL, or YAIK, the *Rhymnus* of the ancients, a large river of the Russian empire. It rises in the Oural Mountains, whence its name, in the district of Troitsk; and, after a lengthened south-westerly course past Orsk, Orenbourg, and Ouralsk, pours its waters by various mouths into the northern part of the Caspian Sea. It is shallow, and of little use for navigation, but teems with fish, which, at the proper season, afford a rich harvest to the Cossacks of the Oural. It is reckoned one of the bulwarks of the Russian empire against the incursions of the nomades of the Tartar steppes.

OURAL, or URAL MOUNTAINS, an extensive mountain-chain, extending, including its subsidiary portions, nearly under the same parallel from the N. border of the Sea of Aral to the shores of the Arctic Ocean, or from about the 48th to about the 69th degree of N. lat. It forms, during the greater part of its course, the boundary between Europe and Asia. Where highest, it attains to an elevation of about 6,400 ft. above the level of the sea; but the ascent to the summit, particularly on the European side, is so very gradual, that its height does not appear nearly so great as it really is. Its breadth varies from 1 to 5 geog. miles. It is very productive both of the precious and the useful metals, being estimated to afford, at an average, about 340 poods of gold, 200,000 do. of copper, 5,500,000 do. of forged, and 8,500,000 do. of cast iron.

OURFA (an. *Edessa* or *Calirrhoë*), a fortified city of Asia Minor, pach. Diarbekir, 81 m. SW. the city of that name, and 112 m. NE. Aleppo. Pop. estimated at 30,000, 3-4ths of whom are Turks and Arabs, and the rest Armenians and Jews. It occupies the slopes of two hills, in the valley between which is a fountain and large basin containing a number of fish accounted sacred by the inhabs. The houses are substantially built of hewn stone, and surmounted by terraces; gutters two or three feet in width run through the middle of the streets, and on each side are tolerably clean pavements. The mosques, which are numerous, have all lofty, and many of them handsome minarets; there are churches also for the adherents of the Greek and Armenian creeds. The bazaars are of tolerable size, and covered in from the weather, some being occupied by cloth merchants, others by goldsmiths and other artisans. Ourfa is a place of considerable industry: large quantities of cotton fabrics are made in it: its goldsmiths' work and morocco leather are highly esteemed, and the produce of the neighbourhood, especially wheat and barley, is sent to Aleppo and the N. of Syria, and, by way of Bir, across the Euphrates. The general trade with Aleppo is carried on almost entirely by Turkish and Christian merchants.

The ancient *Edessa* was for a lengthened period the cap. of the prov. Osroene, in Mesopotamia. It is said to have been one of the numerous cities built by Seleucus Nicator, and continued under his successors as long as they remained possessors of Syria. It was taken by the Arabs during the caliphate of Abubekr, in the 7th century, and, after many vicissitudes, Selim I. united it, in 1517, to the Ottoman empire.

OUSE, a river of England, co. York, one of the principal affluents of the estuary of the Humber, and which may be considered as representing the various rivers that join it before it falls into that great estuary. The Swale, the remotest branch of the Ouse, has its source in the mountain of Shunnor Fell, on the borders of Yorkshire and Westmoreland, one of the most elevated in the great central range. Pursuing a SE. course, the Swale is joined a little below Boroughbridge by the Ure, from Askrig, Middleham, and Ripon. A little lower down, the united river takes the name of the Ouse, and flowing past York, receives at Cawood its important tributary, the Wharfe, which, flowing through Tadcaster, has its source near Arncliffe. From Cawood the Ouse flows SE., with many windings, to Goole, where it unites with the Humber, receiving the Derwent from the N., and the Aire and Don from the S. The Ouse is itself navigable for considerable vessels as far as York, and for barges to Linton; and the Aire, Don, and Derwent have been, partly by improvements in their channels, and partly by canals, rendered navigable to a great distance. The Ouse is, in fact, connected not only with the ports on the Humber, but, by an internal navigation, with Liverpool, London, and Bristol.

Digitized by Google

Exclusive of the above, another river, called the Great Ouse, rises in Northamptonshire, near Brackley: its course at first is E., a little inclining to the N., through Bucks; it then passes Olney and Harrold, and, after many windings, reaches Bedford, where it becomes navigable. It then traverses the cos. of Huntingdon and Cambridge, and the NW. corner of Norfolk, falling into the estuary of the Wash at King's Lynn. From Huntingdon Sluice to Denver Sluice, a distance of about 20 m. in a direct line, the Ouse is now called the New Bedford river, from the greater part of its water flowing in the great channel or drain of that name, dug in the reign of Charles II. The principal affluents of the Great Ouse are the Nen, Cam, Little Ouse, Lake, Wissey or Stoke, and Nar.

OVERTON, a parl. bor. of N. Wales, co. Flint, hund. Maylor, on the Dee (crossed here by a handsome stone bridge), 14 m. S. Chester, and 158 m. NW. London. Pop. of parl. bor. and par., 1,397 in 1861. The town is sit. on rising ground above the river, and is on the whole well built. The church is a venerable structure, picturesquely situated; and in the churchyard are some yews which, for size and beauty, are ranked among the wonders of the principality. The town enjoys the privilege, in connection with Flint and 6 other towns, of returning 1 mem. to the H. of C. Registered electors for the united bors. 727 in 1865.

OVIEDO (*Ovetum*), an ancient city of Spain, cap. of the prov. of Asturias, in a plain at the confluence of the two small rivers Ovia and Nora, 60 m. N. by W. Leon. Pop. 14,156 in 1857. Oviedo is an old-fashioned city, with many narrow and irregular streets; but it has several good squares, that forming the market-place being large and handsome. The town is supplied with water by a magnificent aqueduct of 41 arches, communicating with the fountains in the public squares. The principal public buildings are the cathedral, the collegiate church, and 3 par. churches, besides a district church, 3 hospitals, and 4 colleges. The cathedral (supposed to have been founded in the 8th century) is a large structure of Gothic architecture, and one of the most elegant in Spain, very similar to that of Toledo, though much smaller: it is surmounted by a beautiful tower, and at the W. end is a noble open porch. It contained many valuable vases, taken away during the Peninsular war. It has also a large mausoleum, in which are deposited the remains of 14 kings and queens of Asturias. The university, founded in 1580, is well endowed, and has a large library: the university buildings are among the finest in the town. Oviedo has a weekly market and 3 annual fairs; but its trade is chiefly confined to the neighbourhood. A few tanyards, manufactories of hats, horn combs, and metal buttons are established here, and domestic weaving is carried on to a considerable extent. A manufacture of arms was, till lately, supported by the government; but within the last few years it has been abandoned.

Oviedo is supposed to have been founded about A.D. 759. It afterwards became a place of refuge, during the persecutions of the Moors, for great numbers of Christian clergy, and hence acquired the name *Civitas Episcoporum*. The pope in 901 made Oviedo an archbishop's see; but afterwards this honour was transferred to St. Jago, since which time the bishops of this city have been merely suffragans. The foundation of the university improved the condition of the inhabs.; and for upwards of 150 years Oviedo was a popular resort for literary men and others desiring to avail themselves of the advantages offered by the ecclesiastical seminaries.

OWHYHEE. See POLYNESIA.

OXFORDSHIRE, an inland and central co. of England, of a very irregular shape, bounded S. and SW. by the Thames, by which it is separated from Berks, and having W. Gloucester, N. Warwick, NE. Northampton, and E. Buckingham. Area, 483,840 acres; of which above 400,000 are said to be arable, meadow, and pasture. Surface a good deal diversified. The S. division of the co. is traversed by the range of the Chiltern Hills, but elsewhere it is mostly flat, or merely undulating. Soil various: in the N. it consists of a deep, red, fertile loam; in the middle district it is comparatively sandy, gravelly, and poor; and in the S. thin and chalky soil predominates. The co. is extremely well watered; for, besides being bounded for a lengthened distance by the Thames, it is traversed by the Windrush, Evenlode, Cherwell, and Thame. Oxford is principally in tillage; but though numerous improvements have been effected of late years, its agriculture is far from being in a very advanced state. This is accounted for principally from the tenants not being bound to follow any particular mode of husbandry, and not being restricted in the sowing of wheat, so that the land is frequently foul and overwrought. There is also in many parts a great want of drainage. The soil is particularly suitable for barley, which is the principal crop; but large quantities of wheat are also raised. Turnips extensively cultivated. Dairy husbandry is, in some districts, carried on upon a large scale; and the sheep stock is supposed to exceed 300,000 head. There are but few large estates, and farms are generally small: it is common to grant leases for 7 and 14 years. Manufactures and minerals of no importance. Principal town, Oxford. The co. is divided into 14 hundreds and 217 parishes. It sends 9 mems. to the H. of C., viz. 3 for the co., 2 for the city, and 2 for the university of Oxford; and 1 each for the bors. of Banbury and Woodstock. Registered electors for the co. 5,798 in 1865. At the census of 1861, the co. had 36,034 inhabited houses, and 170,944 inhabitants; while in 1841 it had 32,165 houses, and 161,643 inhabitants. Gross annual value of real property assessed to income tax, 740,022*l.* in 1857, and 818,910*l.* in 1862.

OXFORD, a parl. bor. and city of England, cap. of the above co., on the left bank of the Isis, near its confluence with the Cherwell, which are both crossed by numerous bridges, 52 m. WNW. London by road, and 63½ m. by Great Western railway. Pop. of city, 27,560 in 1861. The city stands on a plain, in the midst of meadows thickly planted with trees, and is surrounded on three sides by the above-mentioned rivers: it has an imposing external appearance from whatever side it may be viewed; but more especially from the adjacent high ground on the London and Abingdon roads. The High Street is one of the finest in England, not only for its width and regular arrangement, but for the beauty and magnificence of the churches and collegiate edifices lining it on both sides: the towers of Magdalen and All Souls' Colleges, the noble fronts of University and Queen's Colleges, and the University Church, are its chief and most admired features. Three other streets meet it at its W. end; one of which, called the Corn Market, leads northward to the airy suburb of St. Giles's: and the second passes southward by the town-hall, and the noble building of Christ Church, towards Abingdon; while the third, called Queen Street, runs westward in continuation of High Street, into the low and densely peopled pars. of St. Ebbe and St. Thomas. Parallel to and N. of High Street, is another fine, though not long line, called Broad Street, in which are Baliol, Trinity, and Exeter

Digitized by Google

Colleges, the Ashmolean Museum, Clarendon Rooms, and the Sheldonian Theatre; and between High Street and Broad Street is an oblong space, occupied by a quadrangular building, forming a hollow square, round which are the academical 'schools,' the upper stories being occupied by the Bodleian Library and Picture Gallery. Between the schools and St. Mary's Church is the Radcliffe Library, a circular Grecian edifice, surmounted by a dome, and contrasting rather strangely with the Gothic structures by which it is surrounded. St. Giles's and Beaumont Streets are lined with substantial private dwellings; besides which, St. John's and Worcester Colleges, and the Taylor-building, a large structure of Corinthian architecture, designed by C. R. Cockerell, greatly contribute to the embellishment of this part of Oxford.

The other streets are mostly narrow, irregular, and crooked. Some new streets, however, with good substantial houses, an entire new suburb, and several hundred smaller tenements, have been erected within the last 50 years, and the city has thus been greatly improved. The principal thoroughfares are well paved, cleaned, lighted with gas, and plentifully supplied with water. The police, a very efficient body, is regulated and maintained by the university. The town-hall is a long stone building, with little pretension to architectural elegance. A corn exchange was erected in 1862, and a large and commodious sessions-house stands near the old castle, which has been converted into a gaol. The arrangements of the co. prison are very imperfect; its size does not admit of classification or solitary confinement to any great extent, and hard labour is only partially enforced. There is likewise a large city workhouse, erected 1862–63. The market-house is a modern range of buildings, entered from the High Street, and, with its aisles, arcades, and shops, forms one of the greatest improvements made in the city. The Radcliffe Infirmary erected towards the middle of the last century by the trustees of the fund left by Dr. Radcliffe, is in the N. suburb, not far from the observatory, which owes its origin to the same founders. It is a plain stone building, within a spacious enclosure, capable of accommodating between 150 and 200 patients, besides medical officers. The other principal edifices, exclusive of those devoted to public worship, are the house of industry, a large structure near the infirmary, built for the reception of the poor belonging to 11 united pars., and several sets of almshouses.

The city is divided into 14 pars., and is the seat of a bishopric. The cathedral church, connected with Christ Church College, presents the styles of different ages, from the 12th to the 16th century: it is built in the form of a cross, and measures, from E. to W., 154 ft.; the length of the transepts being 102 ft., and the height, from the floor to the roof, 42 ft. At the intersection of the nave and transepts rises a tower, surmounted by a spire 146 ft. in height. The carvings of the choir are very elaborate, though somewhat heavy; and in some of the windows are fine specimens of painted glass. Unfortunately it is so hemmed in by college buildings and gardens, that no view of the whole can well be obtained. The cathedral establishment is identical with that of Christ Church College; and the sum annually divided by the dean and eight canons amounts to 12,550*l.*, besides which, each has a handsome residence. St. Mary's Church (used by the university for the academical sermons and Bampton lectures) is a fine structure, in the perpendicular style, surmounted by an elaborately ornamented tower and spire, 180 ft. high. The side towards the High Street, however, is disfigured by an incongruous porch, with twisted columns. The interior is handsomely fitted up. It is likewise a par. church, the living being in the gift of Oriel College. Carfax, or St. Martin's, the corporation church, facing the W. end of High Street, is an oblong stone building, with a low tower. All Saints, in the High Street, is in the Grecian style: the roof is entirely supported on the side walls, and the whole is surmounted by a tower and spire: the living is in the gift of Lincoln College. St. Peter's-in-the-East, near Queen's College, is the oldest church in Oxford. Its original portions are Norman; but it has had many introductions and alterations, mostly in the perpendicular style, which have greatly altered its exterior appearance. The interior has been restored, so as to correspond with that of the original building: the living is in the gift of Merton College. St. Mary Magdalen, at the junction of the corn-market with Broad Street, is in the decorated style; it was enlarged in 1841 by the addition of a large aisle and lofty tower, erected by subscription, in commemoration of the martyrs, Cranmer, Hooper, and Ridley. The other churches of Oxford deserve no particular description. The Roman Catholics have a chapel; and there are places of worship for Wesleyan and Calvinistic Methodists, Independents, and Baptists. Most of the churches have their attached charity schools, besides which there are Sunday schools, attended by great numbers of children of both sexes. The diocesan national schools give instruction to about 600 boys and 300 girls, and a school of industry is attended by 200 girls. A few schools, also, are supported by dissenters. Most of the parishes have considerable funds for the relief of the aged and sick poor; and there are dispensaries, lying-in charities, clothing societies, and provident clubs, to aid the numerous indigent persons in the town and neighbourhood.

The glory of Oxford consists in its buildings devoted to collegiate education, which far surpass those of Cambridge in number and in extent and beauty. Most of them are built in the style peculiar to the 15th and 16th centuries; but a few, as Queen's and Worcester Colleges, with parts of Christ Church and Magdalen Colleges, partake more of the Grecian style, introduced late in the 17th century. They are chiefly built in hollow squares, round which are the members' rooms; and the quadrangles of Christ Church, All Souls, Magdalen, New, and Brasenose Colleges are very large and imposing. The chapels, halls, libraries, and gardens of these establishments are likewise extremely beautiful, and there are shady promenades, such as the Christ Church Meadows and Magdalen Walks, of great extent and beauty.

Oxford in a very great degree depends, and has during many centuries depended, for its prosperity on the University. Till the opening of the Great Western railway, it enjoyed considerable advantages from being on the great roads leading northward to Birmingham and Shrewsbury, and westward to Cheltenham, Gloucester, and South Wales. Between twenty and thirty coaches used daily to pass through the town, and its inns were among the largest in England; but this source of wealth is now almost extinct, and owing to the opposition of the University the railway was, for many years, kept at a distance from the city. There are no manufactories; and the trade of the place is chiefly confined to the supply of the academic inhab. It has the advantage of a canal navigation by the Isis to London, and by the Oxford canal northward, which channels supply it with coal, and all the more bulky articles of domestic consumption. It is also the mart for an extensive

Digitized by Google

agricultural district, and its weekly corn-market is one of the largest in the midland counties.

The corporation of Oxford claims to exist by prescription, but it has also received many charters, the last of which was granted in 3 James I. It is divided, according to the Municipal Reform Act, into 5 wards, and is governed by a mayor, 9 aldermen, and 30 councillors. Corp. revenue, 6,595*l.* in 1862, no part of which was derived from bor. rates. Quarter and petty sessions are held by the recorder; besides which, there is a court of hustings, and a county court. The assizes for the co. are held here: the quarter sessions take place on the Mondays after Jan. 4, April 5, June 28, and Oct. 18. The vice-chancellor of Oxford is a magistrate *ex officio* within the bor., and exercises jurisdiction over the town as well as the University. The city has sent 2 mems. to the H. of C. since the reign of Edward I.; the right of election down to the Reform Act having been in the free burgesses, becoming so by birth, apprenticeship, purchase, or gift. The limits of the bor. were enlarged by the Boundary Act, so as to include with the old bor. the par. of St. Clement's and a part of Cowley par. E. of the Cherwell. Reg. electors of the bor., 2,985 in 1865. Oxford is likewise the election town for the co. Market on Wedn. and Sat., but chiefly on the latter. Fairs, May 3, Mond. after Sept. 1, and Thurs. before Michaelmas-day.

Oxford (originally called Oxnaford, or Oxeneford) lays claim to very high antiquity. It suffered much during the ravages of the Danes, and was the residence of Canute, and of his son Harold Harefoot. William the Conqueror stormed the town in 1067. Soon after, the castle (remains of which are still existing) was built by Robert de Oilgi, one of the Norman barons. Henry I. built a palace here, which continued to be a favourite regal residence during several successive reigns; but it was pulled down at the dissolution of the religious houses. Oxford had a share in the civil wars of Stephen and Henry II., which was terminated by a council held in it in 1154. The history of the city is henceforward closely connected with that of the university, which now began to attain a high celebrity. Hot disputes on points of scholastic doctrine prevailed between the reigns of Henry III. and Edward III., and in the middle of the 14th century a large body of the students removed to Stamford, in Lincolnshire. Pestilence at the same time made great ravages; the city was almost deserted, and the university all but ruined. The introduction of the doctrines of Wycliffe, at the close of the 14th century, occasioned a great commotion in the academic body; the city suffered much during the wars of the Roses, and Oxford was again visited by plague in the reign of Henry VII. The troubles of the Reformation, and the spoliation of the academic houses by Henry VIII., drove many of the students from their habitations; but that monarch may be said to have resuscitated the university by the establishment of the cathedral of Christ Church, as well as by the foundation of professorships for the learned faculties. The forms of popery were restored under Queen Mary, and during this period Oxford acquired an unenviable notoriety by the martyrdoms of the three great reformers, Cranmer, Ridley, and Latimer, in 1555–56. In the following reigns the city and university gradually recovered from their previous depression, and the latter received from James I. and Charles I. many important privileges. Oxford warmly espoused the cause of the royalists during the reign of Charles I., who made it his head-quarters after the battle of Edgehill. For a lengthened period after the Revolution, Oxford was attached to the party of the Jacobites; and, since the accession of George III. down to the present time, the university has, speaking generally, supported what are called high church and high tory principles.

OXFORD (UNIVERSITY OF). This celebrated university lays claim to very high antiquity, but its exact origin is unknown. Tradition has assigned its foundation to King Alfred, about the year 890, and University College is supposed to have been the nucleus round which, in the course of nine centuries, have been formed the present assemblage of colleges and halls. Oxford was known as a school of ancient learning as early as the reign of Edward the Confessor, for Ingulphus, abbot of Croyland, says of himself, that 'he was sent to study at Oxford, where he made greater progress in the Aristotelian philosophy than most of his contemporaries, and became well acquainted with the rhetoric of Cicero.' (See Conringius de Antiq. Academ. Diss., iii. ch. 7.) During the reigns of Henry I. and II., Oxford appears to have comprised a theological school of some note, and civil law was studied in it as early as the middle of the 12th century, about which time doctors both of divinity and law were first created; but it is not designated as an university till the 3rd John, 1201, which is of earlier date than the application of the term either to Paris or Cambridge. The earliest charter was granted by John, and its privileges were confirmed and extended by subsequent monarchs, the act by which it was created a corporate body, by the style or title of 'The Chancellor, Masters, and Scholars of the University of Oxford,' having been passed in the 13th Elizabeth, 1570. The statutes, however, by which the university was long either nominally or really governed, were drawn up during the chancellorship of Archbishop Laud, and received the sanction of Charles I. in 1636. (Ant. à-Wood's Antiq. of Oxf., transl. by Gutch, ii. 403.) The university was sanctioned, also, by papal authority, and Oxford is mentioned in the Constitutions of Clement V. (A.D. 1311), with Paris, Bologna, and Salamanca.

Collegiate foundations date from a very early period, and University, Baliol, Merton, and Oriel Colleges were founded prior to the reign of Edward III. The number of *colleges* or endowed establishments, however, was for some centuries small, in comparison with that of the *halls* or *inns*, in which the students lived, chiefly at their own expense, under the supervision of a tutor or principal. For the establishment of these halls, of which there were about 300 in the early part of the 14th century, nothing more was necessary than the agreement of a number of students to form themselves into a society, under a doctor or master of their own choice, for the chancellor could not refuse his sanction to the establishment. Pestilence, civil war, the decline of the scholastic philosophy, and other causes, led to a diminution in the number of students, in consequence of which, also, the halls decreased in number. The Reformation still further thinned the ranks of the students, and at the beginning of the 16th century the university was almost entirely deserted, and the halls fell to decay; a circumstance which gave to the secular colleges a preponderating weight, and allowed them so to extend their circuit, and increase their numbers, that they were subsequently able to comprise within their walls nearly the whole academical population, though, previously to the 15th century, these endowed establishments appear to have rarely, if ever, admitted independent members. In 1546, the num-

Digitized by Google

ber of halls had fallen to only *eight*, and Antony Wood states that in 1551 the ancient halls were 'either laid waste, or had become the receptacles of poor religious people, turned out of their cloisters.' Many of these buildings were purchased by the colleges, which were thus considerably extended, and began to provide for the accommodation of members *not on the foundation*. Six colleges were founded in the 16th century, chiefly on the sites of old halls or deserted houses. After this period, *one* fresh college (Wadham) was founded, and three out of the eight surviving halls (namely, Broadgates, Gloucester, and Hert Halls) were changed, by endowment, into Pembroke, Worcester, and Hertford Colleges, of which, however, the last is now extinct. The Earl of Leicester, chancellor of Oxford during the reign of Elizabeth, obtained from the university the privilege of nominating the principals of the halls, and this right, which was, in effect, a veto on the institution of new halls, was vested by statute in his successors. Of the five still existing halls, Magdalen and St. Mary's are the best attended by students, and they are the only examples in the country of unendowed academical houses, for the establishments called *halls* at Cambridge differ in no respect from the colleges. In the 15th century an enactment was made compelling all students to become members of some college or hall; and by the regulations of Leicester (which were confirmed by Laud), it was made necessary for them to enter under a particular resident tutor. The business of instruction was originally carried on by the doctors and masters of arts (all of whom had the liberty of teaching), or else by the salaried professors of the university. The tutor, therefore, was at first rather a moral guardian than a professed teacher, and his duties did not consist in teaching the sciences constituting the *trivium* and *quadrivium*, but in imbuing his pupils with good principles, instructing them in the rudiments of religion, especially in the doctrines of the 39 articles, and making them conform generally to the statutory regulations of the university. These duties the tutor still performs, but he has, also, become an acknowledged teacher, giving daily instruction in language and science to those under his charge; and bye-statutes, enacted at different times, have rendered an attendance on the professors' lectures merely optional, and wholly unnecessary either for the acquisition of the university degrees, or for a participation in academical honours. Indeed, only a minority of the professors now give lectures, and, as a rule, they receive little attention from the great body of students.

The buildings belonging to all or most of the colleges and halls are of great extent and beauty. Christ Church, New College, All Souls, Magdalen, and Queen's Colleges are very large, comprising several quadrangles, and lay claim to considerable architectural elegance. The libraries and dining-halls of these establishments are on a large scale, and the rooms within the colleges are capable of accommodating several hundred students. Oxford, indeed, from the great number of its fine academic buildings, has a very imposing appearance when seen either near or at a distance, and it has been not inappropriately called a city of palaces, vying in external and internal beauty with the finest cities.

Each college, as in Cambridge, is governed by its own statutes; and its principal or head must, in most cases, be in orders, as a living commonly forms the chief part of his *solatium*. The direction of the college is vested in the principal and senior fellows (technically called the *seniority*); but in matters affecting discipline the principal is the supreme arbiter, and he appoints the deans and tutors, who are immediately responsible to him for the conduct of the members *in statu pupillari*. The fellowships and scholarships were formerly mostly reserved for the natives of certain towns and counties, or for those who had been educated at certain schools; so that birth or interest, more than any positive amount of scholarship, procured the candidate's election. But a great change was made by a recent statute (17 and 18 Vict.), by which the fellowships and scholarships have been either wholly or in part thrown open to general competition, and the candidates for these usually comprise the most promising students of the University. Most of the colleges have *exhibitioners*, or students, receiving annual allowances from charities held in trust by the fellows, by city companies, trustees of schools, and other bodies; and at Christ Church there are *servitors*, an inferior class of students, somewhat resembling the *sizars* of Cambridge.

Before the year 1855, no person could be a member of the University who had not his name upon the books of some college or academical hall. This restriction was done away with by the 'Oxford University Act' of 1854, by which members of convocation were permitted, under certain conditions, to open private halls for the reception of students. But very few have hitherto availed themselves of the permission.

The corporation of every college, except two, comprises a head, fellows and scholars in various numbers, and a few other members, whose numbers, offices, and titles differ in different societies. All these are members of the foundation, and receive stipends from the corporate revenues. The two exceptions are All Souls and Christ Church. At All Souls there are no scholars; at Christ Church, which is a cathedral establishment as well as an academical institution, there is, besides the dean, a capitular body of canons, while those who answer in some respects to fellows and scholars are called senior and junior students. At Merton the scholars are called postmasters, at Magdalen demies (in Latin *Semi-Socii*.)

The heads of colleges have not all the same title. The title is 'Master' at University, Balliol, and Pembroke Colleges; 'Warden' at Merton, New College, All Souls, and Wadham; 'Rector' at Exeter and Lincoln; 'Provost' at Oriel, Queen's, and Worcester; 'President' at Magdalen, Corpus Christi, Trinity, and St. John's; 'Principal' at Brasenose and Jesus; and 'Dean' at Christ Church.

The head and fellows in every college are the governing body, except at Christ Church, where the dean and canons are paramount. Discipline over the junior members of each society is exercised by the head, his vicegerent, and certain officers of the college, who are commonly appointed from the fellows. Very grave offences are dealt with by the head and fellows convened in a solemn meeting.

In almost every college the head is elected by the fellows. But the dean of Christ Church is appointed by the crown, and the provost of Worcester by the chancellor of the university. Headships are tenable for life.

Fellows and scholars are mostly elected by the head and fellows, or by the head and certain fellows, after a competitive examination. Fellowships, with very few exceptions, are vacated by marriage and by ecclesiastical preferment or accession to property of a certain amount. Otherwise they are tenable for life. Scholarships, since the Oxford University Act of 1854 (17

Digitized by Google

and 18 Vict. c. 81), are generally tenable for five years only.

There are at Oxford four terms in each year, two of which (Michaelmas and Hilary terms) last nine, and two others (Easter and Trinity terms) last from three to four weeks each. By statute, however, the two first mentioned terms may be kept by six weeks' residence, and the two latter by three weeks each; though by those who have taken the first degree in arts, or have passed the examination for that degree (having previously resided 12 terms), any term may be kept by a residence of three weeks. Twelve terms, occupying the same time as the twelve terms at Cambridge, are required for the degree of B. A. from all, except the sons of British and Irish peers, baronets, knights, and their sons. All such students, *if matriculated as such*, and not on the foundation of any college, may be admitted to a degree after eight terms' residence. The examinations for this, the lowest degree, are conducted in a large square building, known as 'the schools,' and consist of two trials, the first, or preliminary examination, called the *little-go*, or *responsions*, and the second the examination for the B. A. degree, both under masters of arts appointed by the vice-chancellor and proctors. There are seven public examiners of candidates for the B. A. degree, and three examiners, or masters as they are called, of the *little-go* schools. The *little-go* examination, which commonly takes place at the completion of the eighth term from matriculation, comprises a mere grammatical and elementary examination, offering few impediments except to the dullest or idlest students. To have failed in this examination is, in Oxford phraseology, said to have been *plucked*; and three successive failures are considered as tantamount to a disqualification from further university pursuits. The next examination, or that for the degree of B. A., is the last to which the student is subject during his probationary residence: the lowest acquirements for the degree comprise a knowledge of the rudiments of religion, sacred history, the doctrines of the thirty-nine articles, the *literæ humaniores*, including, at least, two works of Latin and two of Greek authors (usually Herodotus or Thucydides, with a few Greek plays, and portions of Livy or Tacitus, with Virgil or Horace,) with a fair knowledge either of Aldrich's Logic or Euclid's Elements. For honours, however, a very extended course of reading is necessary; and the amount of historical and metaphysical knowledge requisite for the honourable distinction of a *first-class man* is so great as to require intense labour during the three years' probation. The highest mathematical degrees, however, may be generally obtained by persons of less attainments than the *wranglers* of Cambridge. A few of the students aim at distinction both in classics and mathematics; and there are occasional instances of men having attained a *double first-class*, the highest honour the University can bestow.

The annual prizes of the University, which are subjects of considerable competition among those *in statu pupillari*, comprise three of 20*l.* each, given by the chancellor for the best compositions in Latin verse, Latin prose, and English prose; the first being confined to under-graduates, and the others to those who have exceeded four, but not completed seven years. Sir Roger Newdigate, in 1808, left property for an annual prize for English verses on ancient sculpture, painting, or architecture, confined to under-graduates; a prize of 20 guineas was founded, in 1825, by Dr. Ellerton, for the best English essay, by bachelors of arts, on the doctrine or duties of religion; and two other theological prizes of 30*l.* each were founded by Mrs. Denyer, in 1836, for the best discourses written on selected subjects by clerical members of the University under the standing of 10 years. Besides the foregoing, there are the 'Arnold Historical Essay' prize, established 1850; the 'Stanhope Historical Essay' prize, established 1855; two 'Gaisford' prizes, for Greek composition, established 1856; and the 'Johnson Memorial' prize, established 1862. The principal university scholarships are the Vinerian scholarship and fellowship; five Craven scholarships for under-graduates; four scholarships of 30*l.* a year each, established by Dean Ireland, and tenable for four years; the Boden scholarships for the encouragement of Sanscrit literature; three mathematical scholarships founded in 1831; the Kennicott scholarships for proficients in the Hebrew language; the Eldon law scholarship; the Pusey and Ellerton scholarships; the Taylor scholarship, for modern languages, established in 1857; and the Denyer and Johnson scholarships, established 1863. These prizes and scholarships are contested for with great spirit, and the holders of them are usually among the ablest of those *in statu pupillari*. The prize compositions are in most cases recited in the Academical or Sheldon theatre, at the Commemoration or Act held in Trinity Term for conferring honorary degrees. After the degree of B. A. has been taken, there are no further examinations except for degrees in medicine; but certain exercises, now merely nominal, are performed in the schools, and the candidate must have had his name on the books of some college or hall for a certain number of terms, during some of which also he must reside in Oxford. Subjoined is a summary of the members on the books of the various colleges and halls at the commencement of the first term in 1866:—

Colleges	Members of Convocation	Members on the Books
All Souls	101	117
Balliol	236	387
Brasenose	293	465
Christ Church	578	972
Corpus Christi	124	218
Exeter	379	637
Jesus	89	185
Lincoln	137	215
Magdalen	166	261
Merton	124	214
New	122	212
Oriel	218	418
Pembroke	149	270
Queen's	165	314
St. John's	268	375
Trinity	220	343
University	197	318
Wadham	199	336
Worcester	180	318
Halls.		
Magdalen	167	271
New Inn	17	46
St. Alban	10	47
St. Edmund	41	75
St. Mary	44	103
Private Hall.		
Charsley's	1	7
Total	4,225	7,124

As several members of the University have their names on the books of more than one society, the totals are above the truth by 25 or 30.

There were Matriculations in the year 1865	524
Degrees conferred, of Masters of Arts, in the year 1865	343
Do. do. of Bachelors of Arts, in the year 1865	297

Digitized by Google

The expenses of academical residence vary greatly according to the taste and habits of the student; but about 200*l.* a year may be assumed as the average outgoings of the more economical commoners, and an additional expense of 50*l.* a year is incurred by those who engage the services of a private tutor. The payments to the college for living and tuition are usually called *battels*, and in the case of commoners range from 70*l.* to 90*l.* a year; but those of noblemen and gentlemen-commoners are on a much higher scale, and their annual expenses are consequently much greater.

The University of Oxford is governed by the *Corpus statutorum*, drawn up by Archbishop Laud, modified by the 'Oxford University Act' of 1854. The highest officer is the chancellor, anciently elected for three years, but since 1434 for life. This office, however, as well as that of the high steward or seneschal, is little more than an honorary dignity conferred on some distinguished nobleman; and the chancellor's duties are ordinarily performed by the vice-chancellor, who is, in fact, the supreme executive and judicial authority resident in the university. He is annually selected by the chancellor from the heads of houses, and approved by convocation; but in practice the office is held for 4 years, and 4 deputies are appointed, called pro-vice-chancellors, to take the duties of the office in case of the vice-chancellor's absence or illness. The proctors (two masters of arts, of at least 4 and not more than 15 years' standing) are the conservators of the peace and discipline of the university; they rank next to the vice-chancellor, and have an extensive police jurisdiction over the town. They are assisted in their duties by four pro-proctors, and have at their command a large constabulary force. They are annually nominated by the colleges, each college taking its turn, according to a cycle fixed by the statutes. The business of the university, in its corporate capacity, is transacted by the doctors and masters at large, in two distinct assemblies, called *congregation* and *convocation*, to which the act of 1854 added two other bodies, the *Hebdomadal Council*, and the *Congregation of the University*. The ancient *House of Congregation* consists of regents either *necessary* or *ad placitum*, including resident doctors, heads of houses, professors and tutors of colleges, its business being chiefly confined to the granting of degrees and dispensations: the vice-chancellor has a negative on its proceedings, and the proctors *conjointly* have the same privilege. Convocation is the legislative assembly of the university, comprising all doctors and masters resident or not, whose names are on the books of a college or hall; and its business is unlimited, extending to all subjects affecting the credit, interest, and welfare of the corporate body. The statutes, however, cannot be altered, nor any new laws be enacted, before the matter has been referred to the *hebdomadal council* of the vice-chancellor, proctors, and heads of houses, who, if they approve of the measure, draw up the terms in which it must be promulgated in convocation.

The public professorships of Oxford are of 2 classes, those established by royal foundation, and those supported by private endowment. The regius-professorships of divinity, civil law, medicine, Greek, and Hebrew, were founded by Henry VIII., and canonries in Christ Church cathedral are attached to the chairs of divinity and Hebrew. George I. also founded a regius-professorship of modern history in 1724, which was confirmed by George II. in 1728. There is also, as at Cambridge, a Margaret-professor of divinity. The principal other professorships are those of natural philosophy, founded by Sir W. Sedley, in 1618; of geometry and astronomy, established by Sir H. Savile; of moral philosophy, by Dr. White, in 1621; of ancient history, by W. Camden, in 1622; of anatomy, in 1626; of Arabic, by Archbishop Laud, in 1636; of botany, in 1632; of poetry, in 1708; of Anglo-Saxon, in 1750; of common law, by Chas. Viner, in 1755; of clinical medicine in 1772; of anatomy, practice of medicine, and chemistry, by Dr. Aldrich, in 1803; of political economy, in 1825; of Sanscrit, by Colonel Boden, in 1830; of international law, in 1854; and of zoology, established in 1861. There are also lectureships or readerships of Arabic, anatomy, experimental philosophy, mineralogy, and geology. The lectures are delivered either in the public schools, or in the Taylor Institution, erected from funds provided by the munificent bequest of Mr. Michael Angelo Taylor.

The public orator, who delivers the Creweian oration alternately with the professor of poetry, is chosen by convocation; and his office is to write public letters and make addresses on grand occasions in the name of the University. The archives are kept by a registrar, elected also by convocation: this office was first established in 1634. The Clarendon press is superintended by delegates, of whom the vice-chancellor and proctors form 3 *ex officio*: the rest are heads of houses. The present building, opened in 1829, is of great extent, the bible department is on a magnificent scale, and the editions of classical and other works printed at this establishment are celebrated both for beauty and accuracy. The Bodleian library, founded by Sir Thomas Bodley, is the property of the university, and its affairs are regulated by the vice-chancellor, proctors, and the five *regii professors*, its officers being a librarian, 2 under-librarians, and several assistants. It has received many valuable additions from the libraries of Selden, Archbishop Laud, Bishop Tanner, Browne, Willis, Hearne, Gough, and Malone: and it now comprises, exclusive of about 300,000 printed books, a great number of valuable MSS. It is entitled, also, to a copy of all new works published in the United Kingdom. The former Radcliffe library, founded by Dr. Radcliffe, 1718, and erected at an expense of 40,000*l.*, is at present used as a reading-room in connection with the Bodleian. The books in this collection are principally on medicine and natural history. An observatory was erected in 1772, out of the funds left by the same munificent individual; and the observer (commonly the Savilian professor of astronomy) is appointed by the Radcliffe trustees. The Ashmolean Museum was built in 1683, for the accommodation of a rich collection of natural objects and articles of virtù, brought together by Elias Ashmole. The collection here is supplemented by the more recent one of the University Museum. The foundation stone of the latter edifice was laid in 1855, and it was opened in 1860. It contains lecture rooms, work rooms, laboratories, and numerous models and aids for the study of natural science.

The University of Oxford received, in 1603, the privilege of sending 2 representatives to the H. of C.: the right of election is vested in the vice-chancellor, doctors, and other members of convocation, of whom there were 3,755 at the election of 1865.

OXUS (called by the natives AMOO or JIHOUN), a river of Central Asia, flowing westward through the territories of Budukshan, Kunduz, Bokhara, and Khiva, into the Aral Sea, and extending between long. 58° and 74° E.: estimated length, 1,300 m. This great river was, in 1838, traced up to its source by Lieut. Wood, who ascertained that it rises in the mountain lake of Sir-i-kol, within

Digitized by Google

the district of Pamir, lat. 37°27′ N., long. 73° 40′ E., at an elevation of 15,600 ft. above the sea. (Wood's Journey to the Oxus, p. 354.) Its course hence is SW. for about 70 m. to Langer Kish, where it turns westward. In long. 71° 40′ it passes the ruby mines of Budukshan, near the town of Iskhasm, and is deflected northward by a large offset of the western Himalaya chain. After another turn southward, its course is pretty regularly WNW. through extensive plains, and at the point where Sir A. Burnes crossed it on his way to Bokhara, he found it to be upwards of 800 yards in width, about 20 ft. in depth, with muddy waters and a current of about 3½ m. an hour, and from Kharjoo downwards, for 300 m., it is made available for commercial communication. (Burnes' Travels, ii. 214, and Geog. Journal, iv. 309.) The river passes about 20 m. NE. Khiva, which is situated in a verdant plain, irrigated by numerous canals supplied from its waters. It forms at its mouth a pretty extensive delta, the apex of which is about 50 m. from its principal and only navigable embouchure in the Aral Sea, the breadth of coast from the W. to the E. mouth being about 45 m. The Oxus has numerous tributaries, few of which, however, have been satisfactorily explored. A large river, called the Kokcha, rises in the Hindoo-Koosh, near the celebrated lapis-lazuli mines of Budukshan, and flowing NW., joins it at Kilapack on the S. bank. About 75 m. lower its waters are further augmented by the Ghori, an important stream rising in the Hindoo-Koosh, near the celebrated pass of Bamian, and having a general direction northward, passing in its course the large cities of Ghori and Kunduz. The only other affluent explored by Europeans is the Kulm, joining the Oxus on its S. side, about 30 m. below the tributary last mentioned. Several tributaries flow in from the N. bank, bringing considerable volumes of water; but their extent is almost wholly unknown. The Oxus begins to rise in April, and remains full till July, when it again falls. When at its height it inundates the plain on either side, but especially on the right bank, the extent of the floods being marked by a belt of sedge and weeds, and by a thick jungle of dwarf trees and brushwood.

The Oxus, regarded by some critics as the Araxes mentioned by Herodotus as flowing through the territories of the Massagetæ (i. 201–205, iv. 11), was supposed by Strabo and Ptolemy to fall into the Caspian; and the traces of a valley, nearly resembling the dry bed of a river, have induced some modern geographers to adopt the opinion, that in the course of ages the Oxus formed for itself a new channel, running into the Aral Sea. But, however confused our information respecting this river, it undoubtedly formed the boundary line between the more civilised and settled nations of W. Asia and the wandering hordes of Tartary. The Oxus was the northern limit of the territories subdued by Cyrus and Alexander, and it seems to have been used, at a very early period, as a channel for commercial intercourse between India and the countries bordering on the Caspian and Euxine.

P.

PACIFIC OCEAN (THE), a vast expanse of water, extending between Asia and America (sometimes, though improperly, called the South Sea), and covering a large portion of the surface of the globe. Its extreme S. limit is the Antarctic circle, from which it stretches northward through 132 degrees of lat. to Behring's Strait, which separate it from the Arctic Ocean. Its greatest breadth from E. to W., measured along the equator, is about 10,100 m. Its shape is very irregular; but it becomes gradually narrower, as it extends northward, till at length the Sea of Kamtschatka has a breadth of only 170 m. The American coast is pretty uniform, though high and bold, presenting the long range of the Andes close down to the shore. Its chief indentations are the Gulf of California and Bay of Panama; besides which, at the N. and S. extremities, it is broken and rugged, forming numerous islands and fiords, similar to those of other high latitudes. The coast-line of Asia, on the contrary, is extremely irregular, formed into deep bays, and subdivided by groups of islands into separate gulfs or seas, as the Sea of Okhotsk, separating Kamtschatka from Siberia, the channel of Tartary dividing Saghalien from the main land, and the Yellow Sea separating the peninsula of Corea from China; besides which numerous straits are formed between the islands of the Asiatic archipelago, as the Straits of Sunda, between Sumatra and Java; the Straits of Macassar, between Borneo and Celebes; Torres Straits, between New Guinea and Australia; Bass's Strait, between Australia and Van Diemen's Land, &c. The equator divides this vast expanse of water into the two grand portions of the N. and S. Pacific Oceans, both being remarkable for the numerous groups of small coralline and volcanic islands with which they are studded, and which constitute a separate portion of the world, entitled POLYNESIA, to which the reader is referred for further particulars. These numerous islands form several archipelagos, in which are reefs and sandbanks, that render the navigation extremely difficult and dangerous. The reefs are sometimes of great extent, stretching from island to island, upwards of 600 m. Earthquakes are felt in most of the islands; and all the archipelagos seem to be the seat of extensive volcanic action. (Lyell's Geology, iii. 236–239.)

The general motion of the Pacific Ocean is from W. to E., or from the coast of America to that of Asia; and this movement is very powerful in the vast and uninterrupted extent of its waters, though it gradually decreases as it approaches the shores of Asia, while its temperature increases: its average velocity is stated by Capt. Beechey to be about 28 m. a day. (Geog. Journal, i. 210.) Near Cape Corrientes, in Colombia, the sea, owing to this cause, appears to flow constantly from the land; and from Acapulco, in Mexico, ships are carried with great celerity to the Philippine Islands. In returning, however, it is found advisable to take a course N. of the tropics, in order to have the advantage of the variable winds and polar currents, as well as of a counter-current, which sets eastward in about lat. 10° N. In the S. Pacific, the Polar currents being less interrupted by land, proceed with less deviation from their general course than those in the N. hemisphere; and carry icebergs nearer to the tropical regions than is usual N. of the equator. The equatorial current, as it approaches the shores of Asia, is interrupted and broken by the vast chain of islands, shoals, and submarine banks, which stretch from China to New Zealand. The general direction is

Digitized by Google

changed and modified by the form of these lands, and the vast mass of New Holland is one cause of those dangerous currents around its shores, noticed by Cook, La Pérouse, and Flinders. A current, also, sets eastward in the lat. of the Japanese islands, but turns northward about 150 m. from the shore, and probably joins the stream that runs NNE. through Behring's Strait; besides which there is a variable current on the E. side of Australia, setting southward from August to April, and northward during the rest of the year. The NE. trade wind prevails uninterruptedly between lat. 5° and 23° N.; and, with the currents, enable vessels to sail from America to Asia with great rapidity, and almost without changing the sails. The SE. trade wind, which is not met with near the American coast, varies in its extent at different seasons; but it commonly prevails between the equator and 26° S., so that the region of calms in the Pacific extends over only 5 degrees of lat., or somewhat less than in the Atlantic. In this region, however, there are occasionally severe storms, attended with lightning and heavy rain. (Bennett's Whaling Voyage, i. 190.) These winds are still stronger in the numerous straits of the Asiatic Archipelago, and in the neighbourhood of the Philippine Islands, and immediately N. of Australia, their violence becomes extreme, and even dangerous. The attraction of great masses of heated land also causes local variations in the wind, as is the case in New Holland, on the W. side of which there prevails a constant W. wind. Every island has, likewise, its land and sea breezes. In lat. 40°, on both sides the equator, tempests and variable winds prevail; but it may be remarked generally, that N. of lat. 40° N., winds from W. and NW. are more prevalent than any others, whereas in the regions S. of the trade winds, the prevailing winds are from SW., and often extremely violent. Winds from the S., however, are found along the coast of Peru, and may be attributed in some measure, at least, to the strength of the polar current in the S. hemisphere. They are generally light, though steady; and N. of Guayaquil they always blow from SSE., extending westward as far as the Galapagos.

Vessels in sailing northward from the coast of Chili are favoured both by wind and tide, so that they may safely run near the shore; but those going in the contrary direction sail south-westward, by means of the trade winds, till they arrive in the region of the variable winds, and are obliged to run as far as about lat. 28° S. before they can reach a port. Navigators traversing the ocean between Asia and America sail westward from Mexico, touching at the Sandwich Islands, and entering the Chinese sea between the islands of Luzon and Formosa; but from the ports of S. America the ordinary track is westward, between the Marquesas and Society Islands, beyond which it assumes a WNW. direction, and joins the former in lat. 20° N., and long. 125° E. The voyage from Asia to America is effected by seeking the region of the variable winds N. of lat. 30°, and making the coast of California; but from Sydney the course is pretty direct E. as far as the coast of America, where the winds and currents are favourable for reaching its principal ports. One track for vessels sailing from Sydney to India is through the islands N. of New Guinea; the other, however, by Bass's Strait, is more common, and is the only one used in making the passage from India to New South Wales.

This ocean, which received its name *Pacific* from Magellan, in consequence of the prosperous weather which he met while navigating its surface, was not known to the ancients, nor was the existence of so vast an ocean at all suspected by Europeans till, in 1513, Vasco de Balboa beheld it from the summit of the mountains near the Isthmus of Panama. Magellan traversed it from America to Asia in 1521, and, at the close of the same century, Sir Francis Drake explored a great portion of the W. coast of America, with the view of ascertaining whether this ocean had any other communications with the Atlantic than by the Straits of Magellan and round Cape Horn. The Pacific was pretty extensively explored during the 18th century; and to the observations of Behring, Anson, Byron, Bougainville, Cook, Vancouver, Broughton, and La Pérouse, the world was indebted for the grand outlines of the maps of this ocean. These navigators have been succeeded in the present century by Entrecasteaux, Krusenstern, Beechy, Fitzroy, Bennett, and others. Meanwhile the intercourse of the islanders with Europeans, and the efforts of European missionaries, have introduced among some of them the arts of civilised life; trade has gradually extended itself along the American shore as well as in the different islands; and in Australia and New Zealand the British have established numerous flourishing colonies.

PADANG. See SUMATRA.

PADERBORN, a town of Prussian Westphalia, reg. Minden, cap. circ., at the source of the Pader, a tributary of the Lippe; 52 m. ESE. Munster, on the railway from Cassel to Dortmund. Pop. 12,271 in 1861, exclusive of a garrison of 992 men. The town is walled, is tolerably well built, and has a good cathedral and several other R. Cath. churches, a Lutheran church, synagogue, gymnasium, episcopal seminary, female teachers' seminary, and numerous almshouses, and other charities. It has a few manufactures of starch and leather, but its trade is insignificant. It was erected into a bishopric by Charlemagne, who is said to have made it his head-quarters during his wars with the Saxons. It was the temporary residence of several succeeding emperors, and the palace they occupied still exists. Paderborn was subsequently one of the Hanse towns. In 1622 it was taken and pillaged by the Duke of Brunswick, and in 1802 it was annexed to Prussia.

PADIHAM, a town and chapelry of England, par. of Whalley, co. Lancester, and upper div. of hund. Blackburn, on the Calder, a tributary of the Ribble, 15½ m. E. Preston. Area of township, 1,700 acres: pop. 5,911 in 1861. The town, though small, is respectably built, and has an appearance of considerable activity. The church, subordinate to that of Whalley, was rebuilt in 1766; but its old tower, built at the close of the fifteenth century, is still remaining. The Wesleyan Methodists and Unitarians have their respective places of worship; Sunday schools are established. The inhab. are principally employed in the manufacture of cotton goods. A market once held here has been for some years discontinued. Fairs, 8th May and 26th Sept.

PADSTOW (corrupted from *Patrickstowe*), a seaport, market town, and par. of England, co. Cornwall, and hund. Pyder, on the W. side of the æstuary of the Camel, 11 m. NW. Bodmin, and 220 m. W. by S. London. Area of par., 3,270 acres; pop. 2,489 in 1861. The town, which is situated in a richly cultivated vale, sheltered by bold rocks and hills, has been considerably improved by the erection of new houses; but the streets are inconveniently narrow, and many of the buildings are antiquated. The church is in the perpendicular style: the living is a vicarage in the patronage of the descendants of Dr. Prideaux, the learned author of the famous historical work

Digitized by Google

on the 'Connection' of the Old and New Testaments, a native of the town, where he was born in 1648. The Wesleyan Methodists and other dissenters have also places of worship, and there are 2 Sunday schools, besides a small endowed national school. Facing the river are good quays and a custom-house, the gross amount of customs' duty in 1863 being 186*l*. The entrance to the harbour is between Stepper Point, on the W., and Pentire Point, on the E., close to the former. The passage is narrow, and rather difficult, especially with NW. winds: it has from 13 to 18 ft. water at spring ebbs. This is the only harbour between the Land's End and Hartland Point.

In the reign of Edward I., Padstow furnished 2 ships for the siege of Calais; and in the time of Leland it carried on a considerable trade with Ireland and Wales. In Jan. 1864, 134 vessels of the aggregate burden of 12,605 tons belonged to the port. The town was incorporated by Queen Elizabeth, but the charter has lapsed by desuetude.

PADUA (Ital. *Padova*, an. *Patavium*), a city of Northern Italy, gov. Venice, cap. prov. of its own name, in a low and rather marshy situation, between the Brenta and Bacchiglione, at the termination of the canal of Monselice, 24 m. W. Venice, on the railway from Venice to Milan. Pop. 53,584 in 1857. The city is of a triangular shape, is surrounded with walls and a broad ditch, and intersected by canals. It is dull, damp, and gloomy, having numerous narrow, dirty, monotonous streets, bordered by arcades, without any leading thoroughfare; there are three or four squares or open spaces, which, however, are all of very limited dimensions, excepting the Prato della Valle, the principal public promenade. This, which occupies what was once a marsh, bears some resemblance to a London square; but the interior is differently laid out, being surrounded by a circular stream of running water, the banks of which are fringed with a double row of statues representing distinguished natives of Padua. The houses, though old, are generally well built and lofty. The principal public buildings are the churches, of which there are said to be nearly 100. The cathedral, a large brick edifice of Grecian architecture, has in it little remarkable, except a monument to Petrarch, his portrait, and some Madonnas, one of which is by Titian. The church of St. Anthony, begun in 1259 and finished in 1424, 326 ft. in length by 160 ft. in width, is a vast ugly pile, exhibiting 7 domes, a small octagonal tower above the gable of the front, 2 high octagonal towers, near the choir, and a lofty cone in the centre surmounted by an angel. The splendid shrine of the saint, with *mezzo-reliefs* in white marble, and 2 fine bronze panels, by Riccio, are the principal objects of interest within. The church of S. Giustina, begun and finished during the 16th century, is partly modelled on the foregoing, but is far handsomer. It is of brick, 367 ft. in length, by 252 ft. in the transept, and 82 ft. in height inside. It was built from a design by Palladio; its interior is generally admired. The Benedictine Abbey, to which this church was attached, is now converted into a barrack. The churches of the Eremitani; the Annunziata, with some fine frescos by Giotto; la Madre dolente; S. Gaetano, &c., have all valuable works of art, or are remarkable for their architecture. The Palace of Justice, or town-hall, is one of the most striking edifices in Padua: it has a saloon, 276 ft. in length, 86 in breadth, and 75 in height, being one of the largest in Europe unsupported by columns. The roof is of dark carved wood, shaped like a reversed keel, and sustained by a number of iron ties. The walls are ornamented with frescoes, originally the work of Giotto. In the hall is a monument in honour of Livy, a native of Padua; and at the entrance are two basalt statues, brought from Egypt by Belzoni, who also belonged to the city. The tower of Ezzelin, still used as an observatory, the theatre, the museum of antiquities, the mayor's, and several other official and private palaces, the *café Pedrocchi*, one of the oldest and best establishments of its kind in Europe, several good hotels, and the university buildings, are among the most conspicuous of the remaining public edifices.

The university of Padua, founded in the 13th century, was in the height of its popularity during the 15th and 16th centuries, when it was not only frequented by vast numbers of students from all parts of Europe, but even by some from Mohammedan countries. Its medical school was particularly celebrated. Fallopius, Fabricius ab Aquapendente, and Morgagni have been among its medical teachers; and Galileo and Guglielmini among its professors of philosophy. Dante, Petrarch, and Tasso were of the number of its pupils. Harvey took his doctor's degree here in 1602, Evelyn also studied here in 1645, and it was resorted to by many other distinguished foreigners. Defects of discipline and the quarrels of the students seem to have been the first causes of the decline of the university, which has, for more than a century, been in a languishing state. But it has still to boast of several distinguished professors, and ranks as the second seminary of its kind in Italy, that of Pavia being the first. It has faculties of theology, law, medicine, and philosophy, and 35 professors, with between 400 and 500 students. It is governed by a senate, composed of a rector and 12 other individuals chosen from its general assembly; which includes, with the directors, deans, and professors, all the doctors who have graduated at Padua, and reside in the city. The university library comprises about 90,000 vols., and it has a fine botanic garden, one of the oldest in Europe. Padua has a celebrated society of arts and sciences, an episcopal seminary, with an extensive library, formerly belonging to the Benedictine Abbey, a city school, 2 gymnasia, a high female school, agricultural, veterinary, and various other schools, a famous chemical laboratory and cabinet of mineralogy, and several libraries and museums of the arts. Among the charitable institutions are a civil and military hospital, a workhouse, foundling and orphan asylums.

Padua is a bishop's see, and the seat of the council and superior judicial courts for the deleg. It has been celebrated, both in ancient and modern times, for its woollen manufactures, but these have greatly declined since the time of the Venetian republic. It has still, however, manufactures of woollen cloth, broad silks, silk ribands and leather, and an extensive trade in wine, oil, cattle, garden vegetables. The fair of St. Anthony, which lasts 15 days, from June 13th, renders the city for a time a scene of bustle and gaiety; and the inhabitants derive some benefit from Padua being, for a part of the year, the residence of the Venetian nobility.

The city is very ancient, being said to have been founded by Antenor, after the siege of Troy:—

> 'Hic tamen ille urbem Pataví sedesque locavit
> Teucrorum et genti nomen dedit.'
>
> Æneid, i. 242.

The historian Livy was a native of Padua; and the alleged *patavinity* of his style has long been a topic for critical discussion. Padua was taken by Alaric, Attila, and the Lombards; but, being restored by Charlemagne to something like its former grandeur, it became, under his successors, flourishing and independent. In 1318 it came into the

Digitized by Google

possession of the Carrara family, and in 1405 was united to the Venetian territory. Under the French it was the cap. dép. Brenta.

PAIMBŒUF, a sea-port town of France, dép. Loire Inférieure, cap. arrond., on the Loire, 22 m. direct distance W. Nantes, of which it is the deep water harbour. Pop. 3,509 in 1861. The town consists principally of one good street fronting the quays which border the river. It has a fine mole 200 ft. in length, a school of navigation, a communal college, and court of primary jurisdiction. Vessels of more than 200 tons trading with the port of Nantes stop here to load or unload their cargoes.

PAINSWICK, a market town and par. of England, co. Gloucester, hund. Bisley, on the S. declivity of Sponebed Hill, 6 m. S. Gloucester, and 90 m. W. by N. London. Area of par. 6,510 acres. Pop. of par. 3,229 in 1861. The town is small and irregularly built, the streets being neither paved nor lighted. The church, which is large, has at its W. end a fine tower and spire 174 ft. in height, but the building is rendered unsightly by the strange admixture of Doric and Ionic pillars, with the more ancient architecture in the Gothic style. There are also places of worship for Dissenters, and 6 Sunday schools, furnishing religious instruction to about 500 children of both sexes. The town has an endowed free school for 26 boys, besides which 3 subscription schools, and an infant school, are attended by 300 children.

PAISLEY, a parl. bor., market and manufacturing town of Scotland, co. Renfrew, partly on rising ground, and partly on a plain, on both sides the White Cart, 3 m. S. Renfrew Ferry, on the Frith of Clyde, and 8 m. W. by S. Glasgow, on the railway from Glasgow to Greenock. Pop. 47,406 in 1861. The town with its suburbs is spread over a tract of ground comprising an area of 2½ sq. m., but the boundary of the parl. bor. embraces an area of about 6 sq. m. Its main street runs from E. to W. for nearly 2 m., and forms part of the road from Glasgow to Beith, and the towns on the coast of Ayrshire. Another long line of road passes through it from N. to S. That part which lies E. of the river is called the new town, the first houses in this important addition to the bor. having been erected in 1779. But, though well built, Paisley is not so handsome as some of the larger Scottish towns. Of late years, however, its appearance has been greatly improved by the substitution of numerous substantial houses for low thatched cottages. The streets are generally paved, and are lighted with gas; and the town is well supplied with water from the Gleniffer Braes, by means of reservoirs constructed under an act passed in 1836, at a cost of 60,000*l*. In the neighbourhood are some elegant villas and baronial seats. Among the more important of the public edifices is that for the civil business of the town and county, incl. the gaol and bridewell, erected in 1820, at an expense of 28,000*l*., with a subsequent addition which cost 10,000*l*. The original parish of Paisley has been divided into four distinct parishes. The Abbey church, which is a collegiate charge, consists of the nave of an ancient monastery, being, with the exception of a small chapel, and a N. transept window, the only portion that now remains of that once splendid building. The High church, on an eminence in the old town, or 'the borough,' as it is commonly called, is an elegant building, with a spire 160 ft. in height. The Free church has 9 places of worship, but none of these require any particular notice, except the Free High church, an imposing Gothic fabric. The episcopal chapel is a handsome Gothic building, and one of the Secession churches is of Grecian architecture. The new town is connected with the bor. by 3 bridges, and the river is also crossed by the line of the Glasgow, Paisley, and Ayr and Greenock railways, which passes through the town. There are barracks in one of the suburbs for the accommodation of a battalion of infantry. Here, also, is a theatre, with 2 assembly rooms, and other places of amusement. In 1845 a cemetery was laid out on rising ground to the W. of the town.

In addition to the churches of the establishment and the Free church, there are many Presbyterian dissenting churches, Baptist places of worship, Methodist chapels, Independent chapels, and separate churches belonging to the R. Catholics, Episcopalians, Unitarians, and New Jerusalemites. Paisley has also a seminary for theological instruction, connected with the Reformed Presbyterian Synod, with an extensive collection of theological books. The grammar school, a royal foundation (though the endowments have nearly disappeared), established by James VI. in 1576, and confirmed by subsequent royal deeds, is in a highly efficient state. There are, ex. Sunday schools, about 50 schools in the town and par., all of which, with some trifling exceptions, are unendowed. From a legacy left by a Mr. Neilson, of Nethercommon, Paisley, an extensive school-house, one of the finest buildings in the town, has been erected. A philosophical institution was founded in 1808, in which courses of lectures on different branches of science and literature are delivered. An Athenæum, instituted in 1847, has a news-room and classes for modern languages and music. An artisan's institution, similar to the last, was also opened in 1847. Among the eminent characters that Paisley has produced may be named Alexander Wilson, the celebrated American ornithologist, and Robert Tannahill, the Scottish poet. Dr. Witherspoon, author of various theological works, and afterwards president of the college of New Jersey, was for ten years one of the ministers of the town.

Manufactures.—Paisley was early distinguished by its manufactures. The first impulse given to this department was by pedlers or travelling merchants, who, soon after the Union, bought the goods made here and sold them in England. A good many of these merchants having made some money, settled in the town. The articles then manufactured were striped linen cloths, handkerchiefs, and Bengals: these were succeeded by plain lawns, some of them chequered with cotton, and others ornamented with a great variety of figures; and by linen gauze. One of the principal branches of industry carried on in the town during last century was the manufacture of fine linen sewing thread, called '*Ounce*' or '*Nun's*' thread. At the close of the century the annual value of this article was estimated at about 60,000*l*.; but it has since been almost wholly superseded by the employment of cotton thread. This change has not, however, been disadvantageous to Paisley; for the production of the latter gives employment to about 1,700 workpeople. In 1760 the making of silk gauze was first attempted, in imitation of that of Spitalfields; and it soon attained to great importance, both in the town and villages round, to the distance of 20 m. This trade afterwards declined; but not till the Spitalfields manufacturers had been driven out of the market, and some of them had transferred their establishments to Paisley. It has again partially revived. In 1785, when the silk gauze trade experienced a temporary interruption, many of the principal houses in the town entered into the muslin manufacture, which

Digitized by Google

rose to a great height of prosperity. But with the exception of fine muslins, embroidered with fancy needle-work, this branch has been wholly abandoned. The embroidery is executed by females in the villages in Ayrshire and in the N. of Ireland, about 2,000 being now in the employment of the only Paisley house engaged in the trade.

The shawl manufacture, introduced in 1805, is one of the staple branches carried on in Paisley. Imitation shawls of all kinds have, at different times, been made here,—such as Thibet shawls, Cashmere ditto, and Zebras, the last being so called from their resemblance to the skin of the zebra. The genuine Cashmere wool is imported for making the Cashmere shawls, but Australian and fine German wools are also used. It is a curious and not easily explained fact, that the yarn is generally spun in France, and that the attempts to produce it here have not hitherto been successful. Edinburgh had long the lead in this manufacture, but it has been nearly beat out of the field; and, though a few shawls are still made in Norwich, Paisley is at present without a British rival in this department. It has, however, a close and keen competition to sustain with the Parisian shawl manufacturers, who have attained to great perfection in the art. Next in importance to the imitation Indian shawls are satin and woollen shawls, especially the latter, in tartan and other patterns. A similar description of woollen shawls, but of a coarser fabric and an inferior dye, are made at Galashiels. Cotton-crape and embroidered shawls are, also, produced, but only to a limited extent: and this is the case with the elegant shawl, called *Chenille* (caterpillar) from its variegated colour, its roughness, and the softness of its feel.

Within the last twenty years the printing of thin woollen shawls, with *mousselines-de-laine*, cottons, and silks, has been introduced into the town, and is now become of primary importance. Some of the print-works are extensively employed by London houses, who send their goods here to be printed. The business employs in the town about 2,500 hands, and from 1,000 to 1,200 in the country. Until recently the finest woollen cloths used in printing were all brought from France, and the other qualities from Bradford; but latterly the Paisley manufacturers have succeeded in producing cloth equal to that formerly imported; and in some establishments the whole process of manufacturing, from the carding of the wool to the finish, is conducted on the premises.

All the trades depending on and subordinate to the shawl manufacture have largely increased, especially that of dyeing. There are also power-loom factories for the weaving of the cottons used in printing; but it is a curious fact that the yarn used in their manufacture is all imported.

The town has several iron and brass foundries; a large tan-work; large works for machinery, and a very extensive manufactory of agricultural implements; soap-works; several extensive bleach-fields, and various other minor branches of business, inc. the manufacture of fine starch from sago. From 1825 to 1847 the trade of Paisley was subject to great vicissitudes,, and so depressed was its situation that, in 1841–42, no fewer than 14,921 persons were at one time in the receipt of charity. But since 1847 there has been a very material improvement. Employment has been steady and fairly remunerated. Various new branches of industry have been opened, and the pop. is not so dependent as formerly on the caprices of fashion.

Renfrew, or Renfrew Ferry, 3 m. from the town, is, properly speaking, the port of Paisley; but the White Cart, which falls into the Clyde, 3 m. from the bor., and only a few hundred yards W. of Renfrew, is navigable to Paisley for vessels of 80 tons. Much has been done to improve the navigation of this river. A railway has been opened between the town and Renfrew Ferry. A railway from Glasgow passes through the town, where it divides itself into two branches, one going to Ayr, with a branch by Kilmarnock to the Dumfries and Carlisle line, the other leading to Greenock. The Glasgow, Paisley, and Johnston canal, opened in 1811, commences at Port Eglington, near Glasgow, passes Paisley, and terminates at Johnston, a distance of 11 m. The neighbourhood of the town produces coal, ironstone, fire-clay, and potters' clay; and there are manufactures of sulphate of iron, or copperas, alum, muriate of potash, and sulphate of ammonia.

Previously to the passing of the Reform Act in 1832, Paisley, notwithstanding its wealth and importance, had no parliamentary representative; but the act in question conferred on it the privilege of sending 1 mem. to the H. of C. Registered voters 1,349 in 1865. The bor. is governed by a provost, 4 bailies, a treasurer, and 10 councillors. Municipal revenue 628*l.* in 1863–64.

Paisley is very ancient, and is supposed to occupy the site of the Roman station *Vanduaria*. In 1164, Walter, son of Allan, lord high steward of Scotland, founded a monastery here, of which nothing remains but the nave and its collateral appendages, now used as the parish church. This abbey, the precincts of which were enclosed with a wall about 1 m. in circ., was the burial-place of the Stuart family till they became kings of Scotland. At the Reformation, this property passed into the hands of a branch of the house of Hamilton, now represented by the Marquis of Abercorn, in whose possession (with a slight interruption) it has ever since remained. Paisley, in 1483, was regularly constituted under the jurisdiction of the abbot. The 'Black Book of Paisley' has been ascertained to be simply a MS. copy of Fordun's 'Scotichronicon.' The 'Chartulary of Paisley' was printed in 1832 by the Maitland Club of Glasgow. Sir William Wallace is said to have been born at Elderslie, about 2 miles SW. of the town.

PALEMBANG. See SUMATRA.

PALENCIA, a city of Spain, k. of Leon, cap. prov. of its own name, on the Carrion, 57 m. SE. Leon, and 118 m. NNW. Madrid. Pop. 12,656 in 1857. The principal public buildings are the cathedral (one of the largest Gothic structures in Spain), 5 parish churches, a well-endowed hospital, a poor-house, foundling asylum, and the bishop's palace. Palencia had a university prior to the establishment of that at Salamanca; and it still possesses a superior seminary, with about 60 students, of grammar and philosophy. It has manufactures of woollen goods, blankets, coverlets, and serge, which meet with a ready sale throughout Spain; and of hats and earthenware, with tanneries. &c.

PALERMO (an. *Panormus*, from πᾶν, all, and ὅρμος, a station for ships, from the number of vessels that frequented its port), the cap. city and principal sea-port of Sicily, on its N. coast, towards its W. extremity, on the terminus of a line of railway from Messina. Pop. 187,182 in 1862. The city is built along the SW. side of an extensive bay, in a plain which, from its luxuriance, and from being surrounded by mountains on three sides, has been termed the 'golden shell' (*conca d'oro*). In front of the city, the numerous steeples, cupolas, and towers of which give it a noble appearance from the sea, is the Marina, a raised platform or terrace, extending above 1 m. along

Digitized by Google

the bay, and about 80 paces in breadth. At the E. extremity of this walk is the Flora, a public garden laid out in walks, interspersed with statues, fountains, and summer-houses. People of all ranks are admitted, and in fine evenings it appears the rendezvous of the whole city. Adjoining the Flora is the botanical garden, at the entrance of which is a building similar to an ancient temple, in which botanical lectures are delivered. The garden is well laid out, and contains an extensive collection of valuable plants. On the W., Palermo extends to the foot of the rocky and abrupt mountain Pellegrino, but on the E. a reach of well cultivated grounds ascends gradually to Cape Zafarana, which bounds the bay on that side. The city is surrounded by an old wall, of little or no strength, some of the bastions being occupied by gardens, while others have been cut away to increase the breadth of the Marina. It is, however, defended by a citadel and several other forts, which are tolerably strong towards the sea; though from being much scattered they would require a large garrison, and could not hold out against a force investing the city by land.

Palermo is regularly built, and, if better finished, might be esteemed an elegant city. Two large streets, the Cassaro and Strada Nuova, each upwards of a mile in length, intersect each other at right angles, dividing the city into four equal parts, and each leading to one of the four principal gates. These streets are well paved with large flat blocks of lava, and are faced throughout their whole length with handsome buildings. The central space where they meet is an octagon (*Piazza Ottangoloza*); each of its sides consists of an edifice three stories in height, combining the Doric, Ionic, and Corinthian orders; and it is besides enriched with statues and fountains. A *coup-d'œil* of similar magnificence to that enjoyed from this piazza is, perhaps, not to be met with in any other city of Europe.

There are several public places or squares adorned with obelisks, jets-d'eau, and sculpture, of which the principal are the column of St. Dominic, and the superb fountain opposite the pretorian palace. But all the streets, except those above named, are irregularly laid out, narrow, and ill built. The houses are almost all high, and a number of them have balconies with iron railings. These projections lessen the symmetry of the architecture, but this is more than countervailed by the convenience they afford of enjoying the cool evening breeze in so warm a climate. Almost every house has a common stair; and each story of apartments forms, as in the old houses of Paris and Edinburgh, the separate residence of a family. Several of the mansions of the nobility are admired for their architecture, but their interior is usually deformed by a multiplicity of false ornaments. Many have marble columns, either in front, or in the large court, which they generally inclose; but their effect is frequently destroyed by the meanness of the adjoining buildings. Altogether Palermo presents an incongruous mixture of pomp and poverty, exemplified in noble ranges of palaces disgraced at their bases by shops and stalls, and in showy equipages parading the same streets with sturdy mendicants vociferously demanding food, or sluggishly taking their siesta on the pavement. Swarms of priests, nobles, officers, and other loungers, yawn on chairs before the coffee-houses; and artisans of every kind at their respective employments outside their shop doors, usurp the sides of the streets, obliging foot passengers to walk in the centre among the numerous carriages. The constant calling out this occasions on the part of the coachmen, added to the hurry of business, and the groups round the ice-water stalls, form an animated and singular if not a pleasing scene.

The supply of water is peculiarly abundant, and most of the houses have fountains, even in their second and third stories; hence the city is in general clean, except after heavy rains, when, from the lowness of its site, it becomes extremely muddy, and recourse is sometimes had to movable iron bridges for crossing the streets. There is an excellent supply of provisions of every description, and the principal streets are well lighted. The city, excepting on the site of the ancient port, where malaria is generated in autumn, is healthy. The temperature of winter seldom falls below 50° Fah. In summer, however, the thermometer keeps for months between 80° and 90°; and then the inhab. generally shut up their houses and shops a little before noon, keeping them shut for 3 or 4 hours, an interval during which all is silence and stagnation. The *sirocco* is very oppressive, but fortunately not of frequent occurrence.

Palermo has a great number of public edifices and institutions. Convents and churches are particularly numerous; of the former there are even said to be nearly 70. Most of the churches are sumptuous: but they discover no taste, and offend the eye by a profusion of ornament. A striking monotony reigns in their construction, being generally built with an elevated façade, a large nave, and 2 side aisles, bounded by lateral chapels, dedicated to various saints, and decorated with pillars, paintings, statues, flowers and candelabra. The cathedral, erected about 1180, by Archbishop Waller, an Englishman, is externally of Gothic architecture; and, though not in the best taste, is a tolerable specimen of the style of the 12th century. It has, however, been spoiled by the modern addition of a cupola; and its interior has been somewhat recently altered to the Greek style. Within are many fine red porphyry sarcophagi of considerable antiquity, in which have been deposited the remains of different sovereigns of the island, including Roger, the founder of the Norman kingd. of Sicily, and the emperor Frederick II. The church of St. Giuseppe, also on the Cassaro, is profusely and richly ornamented, and has some fine columns of grey Sicilian marble, nearly 60 ft. in height. The royal palace is a spacious building of mixed Arabic and Norman architecture. It has a gallery with some good paintings, and a neat armoury: on its summit is the observatory erected in 1748, whence Piazzi discovered the planet Ceres. Attached to the palace is the beautiful little church of St. Peter, which, with its crypt and superb mosaics, forms one of the most complete specimens of Saracenic magnificence extant. The square in front has a statue of Philip IV. of Sicily, surrounded by four other statues. The tribunal of justice and the custom-house occupy a large edifice on the Marina, formerly the palace of the Inquisition, abolished in 1782. The public prison, in one of the main streets, built round a large court-yard, though well supplied with water, is dirty, and in many respects badly provided. The Jesuits' college, a magnificent edifice in the Cassaro, with various schools, and a fine library, in which the Sicilian parliament formerly held their sittings; the university, the archbishop's palace, and the principal government pawn-bank, a spacious building, with a neat portico, are among the remaining most remarkable edifices. There are several theatres, but they are generally ill constructed, and not to be compared to those of Naples, Paris, or London.

At the NW. extremity of the city is the arsenal, from which a fine mole, fully one-fourth m. in length, having a lighthouse and battery at its ex-

Digitized by Google

tremity, projects S. into 9 or 10 fathoms water, forming a convenient port, capable of accommodating a great number of vessels. This important work cost about 1,000,000*l.* sterling; but the light-house, though a splendid structure, is said to be very ill lighted. Ships that do not mean to go within the mole may anchor about half a m. from it, in from 16 to 23 fathoms. There is an inner port, reserved for the use of the arsenal, with large naval magazines. There is also a small cove in front of the town, called the *Cala felice*, the representative of the two ancient harbours, and capable of accommodating vessels of from 150 to 200 tons. On its E. side is the pratique office; the lazaretto, a dirty and inefficient establishment, is in a rocky bay at the back of the mole.

Few indications exist of the ancient splendour of the city, except the remains of a naumachia, and some vestiges of an amphitheatre. In the senatorial hall are preserved fragments of various marbles; and in the royal palace are two ancient bronze rams, brought thither from Syracuse, and said to have been made by Archimedes.

In the neighbourhood are many fine specimens of Moorish architecture; the principal being the Saracenic fortress of Kuba, now used as cavalry barracks; and the Ziza, a palace erected in the 9th or 10th century, still in good repair, and occasionally used as a royal residence. Near the latter is a Capuchin convent, with a *cadavery*, or receptacle for the reception of dead bodies. A royal residence, in the Chinese style, stands outside the walls, near M. Pellegrino; and about 10 m. E. Palermo, near the bay, is La Bagaria, the favourite residence of many Sicilian nobles. Several of the villas of the nobility are richly adorned, both by nature and art.

Palermo is the see of an archbishop, who is primate of Sicily; the seat of an intendant and council of intendency; a departmental council; a supreme court of justice, with 14 judges; a civil and criminal court for the intendency, and a tribunal of commerce. It has a university, attended by about 600 students, comprising several eminent names among its professors, a library of upwards of 30,000 vols., a printing press and several museums. Palermo has also a high female seminary, second to that of Naples; a college of nobles, an episcopal seminary, and many inferior schools; numerous charities, including 2 large hospitals, a lunatic and a foundling asylum, houses of industry for mendicants, public baths, and several public libraries and scientific associations.

Silk manufactures were established here in the 11th century, and they still form the chief branch of manufacturing industry, though much less flourishing than formerly. Cotton fabrics are also produced, with oil-cloth and leather, and there is a glass work, the only one in Sicily. The tunny fishery employs from 900 to 1,000 boats, and 3,500 fishermen. The great articles of export are shumac, fruits of various sorts, including oranges and lemons, wine, manna, and brimstone. The imports consist principally of sugar and other colonial products; cotton, linen, silk and woollen fabrics; earthenware, hardware, and other manufactured goods.

Sicilian writers have made many absurd statements concerning the foundation of Palermo; but the most rational opinion, confirmed by the authority of Thucydides and Polybius is, that it was founded by a colony of Phœnicians; the beauty of the situation, and the convenience of the port, whence, as already seen, it derived its name, being powerful inducements to a trading people, to make it a settlement. (Thucyd., lib. vi.; Polybius, lib. i. cap. 38.) It subsequently fell into the hands of the Carthaginians, who made it the capital of their Sicilian dominions. Soon after the beginning of the first Punic war it passed into the hands of the Romans, who established a colony in it (Strabo, lib. vi.), conferred on it various privileges, and allowed it to be governed by its own laws. In a subsequent age the Saracens made it the capital of their Sicilian territories; and, since their time, with the exception of some short intervals, it has been the capital of Sicily.

PALESTINE. See SYRIA and PALESTINE.

PALHANPOOR, a fortified town of Hindostan, prov. Gujrat, 88 m. NNW. Ahmedabad. Lat. 24° 11′ N.; long. 72° 20′ E. Pop. estimated at 40,000. The town is about 1½ m. in circ., and is surrounded by a brick wall flanked with towers, the gates being defended by outworks, mounted with small cannon. It is of considerable political importance, being a frontier town on the desert separating Gujrat from Sinde and Cutch, and on the main route from Rajpootana southward.

PALMA. See MAJORCA.

PALMAS, the principal town of the Canary Islands, which see.

PALME, or PALMI, a town of South Italy, prov. Reggio, cap. distr., on the Gulf of Gioja, 21½ m. NE. Reggio. Pop. 10,442 in 1862. The town was partially destroyed by the earthquake of 1783, but has since been restored. It is well built; its streets being regular, and its houses mostly of stone, and in good taste. In its centre is an elegantly sculptured and well supplied fountain. It has some manufactures of silken and woollen fabrics, and trades in oil and liqueurs.

PALMYRA (the Tadmor of the Scriptures, by which name it has always been designated by the Arabs), a celebrated city of antiquity, and the cap. of the region of Palmyrene in Syria, in an oasis in the midst of deserts in the modern pach. of Damascus, 147 m. SE. Aleppo, and 187 m. SSW. Damascus; lat. 34° 29′ N., long. 38° 48′ E. This once famous city is now all but deserted, not having more than 100 inhabs., and it derives its whole importance from its classical associations and the number and magnificence of its ruins. These, which stand near the E. declivity of a mountain range running from N. to S., occupy a space of about 3 sq. m., though it is probable that the ancient city extended over a larger area, exclusive of the tombs on the tops and sides of the adjacent hills. The oasis, in which the city is situated, is traversed by two streams, which, though hot and sulphureous, are said to be wholesome, and not disagreeable. But the water used in the ancient city was of the best quality, being brought from a considerable distance by a large subterranean aqueduct, of which there are still some remains. The first view of the city is described by all travellers as extremely magnificent. 'On opening upon the ruins,' says Captain Mangles, 'as seen from the Valley of the Tombs, we were much struck with the picturesque effect of the whole, presenting altogether a most imposing sight. It was rendered doubly interesting by our having travelled through a wilderness destitute of a single building, from which we suddenly opened on these innumerable columns and other ruins, the snow-white appearance of which, contrasted with the yellow sand, produced a very striking effect.' (Irby and Mangles's Travels, p. 262.) The ruins are not, however, to be compared, as respects the size of the gates, columns, and temples, with those of Baalbec and Thebes; but they are more remarkable than either for their vast extent, and they are less encumbered with modern fabrics than most other ancient remains.

The ruins now extant comprise the fragments

Digitized by Google

of two or three temples, several gateways (one of which is more perfect than the rest), colonnades, and sepulchres. With respect to the antiquity of these ruins, it is difficult to form a conjecture: the tombs are evidently the oldest, but even these do not date as far back as the Christian era. The other buildings are considerably more recent, and most of the fine and expensive edifices appear to have been constructed during the three centuries ending with the reign of Diocletian.

On approaching the city a ruined mosque, built by the Saracens, introduces the stranger to a fine gateway, having a lofty central arch, flanked by two others of smaller size, which lead directly to a grand avenue, which, from the remains, must have been nearly 1 m. in length, and bordered on either side by rows of Corinthian columns, of which, however, only 114 now remain. This avenue leads to a gateway, beyond which are ranges of pillars supporting a frieze and entablature, supposed by Mr. Addison to be the ruins of two noble gateways, that may have led from the central avenue to other colonnades now entirely destroyed. A circular colonnade, of which eighteen columns only are now standing, has in its centre a small but richly ornamented building, with niches for statues; and immediately beyond it are the prostrate remains of a magnificent building, constructed of a species of marble superior to that found in other parts of the ruins. It appears to have comprised two very large rooms; but whether it were a temple or palace, is difficult to determine. By far the most extensive ruin, however, is the temple of the sun, the grand entrance to which was supported by four fluted Ionic pillars, and adorned with rich carvings of vine-leaves and clusters of grapes in bold and spirited relief, beautifully chiselled. The outer precinct, which encloses a quadrangular space of 220 sq. yards, is formed by a lofty wall, adorned with pilasters both within and without. Inside this court are the remains of two rows of noble marble pillars, each 37 ft. in height, and another row of columns 50 ft. in height, appears to have encircled the temple, which, however, was only 100 ft. in length by 45 ft. in breadth: it has since been converted into a mosque, and its interior is disfigured by passages from the Koran written round the walls.

The sepulchres, which are, perhaps, the most interesting of all the ruins, occupy the tops and sides of the surrounding eminence, some presenting mere heaps of rubbish; others half fallen, exposing their shattered chambers; while one or two still exist almost entire. They are built in the shape of square towers, from 3 to 4 stories in height, each forming a sepulchral chamber, with recesses divided into compartments for the reception of the bodies. Some of the chambers are ornamented with Corinthian pilasters and sculptures in almost perfect preservation, executed in high relief; the walls are of white stucco, and the ceilings are divided into diamond-shaped compartments, delicately ornamented with white stars on a blue ground: over the doorways are tablets with inscriptions both in Greek and Palmyrene. A few of the streets may be traced with some difficulty, and the foundations of houses are distinguishable in some places; but not a vestige remains of the old walls destroyed by Aurelian, though a wall still exists that has been made of materials from the sepulchres, and was probably erected soon after the demolition of the older fortifications. The inscriptions are both in Greek and in the unknown Palmyrene language; all of those on the columns are honorary, generally to the effect, that the senate and people inscribed them in honour of an individual whose pedigree is given through several generations. The inscriptions on the tombs are in Greek, and tolerably perfect. Facsimile copies of them are given in the great work of Messrs. Wood and Dawkins, which also contains drawings of all the principal buildings of Palmyra.

History.—The earliest accounts of the existence of Palmyra are derived from the sacred writings, which state that 'Solomon built Tadmor in the wilderness and all the stone cities which he built in Hamath' (2 Chron. viii. 3, 4); and his motive for thus founding it was, according to Josephus, 'because in that place were fountains and wells of water. He gave it the name of Tadmor, which is still prevalent among the Syrians; but the Greeks name it Palmyra.' (Ant. Jud., l. viii. ch. 6.)

Pliny has noticed the city, and the peculiarities in its situation to which it owed its rise and importance: '*Palmyra urbs nobilis situ, divitiis soli et aquis amœnis; vasta undique ambitu arenis includit agros; ac velut terris exempta a rerum natura, privata sorte inter duo imperia summa, Romanorum Parthorumque, et prima in discordia semper utrimque cura.*' (Hist. Nat., lib. v. cap. 21.) The fertility of the oasis round Palmyra made it a suitable situation for a small town; but its position in other respects was still more advantageous, from its being the resting-place of the caravans between the Persian Gulf and the great cities on the Euphrates and Tigris, and Aleppo, Damascus, and the ports on the Mediterranean. Palmyra thus became a principal emporium of the commerce between the Eastern and Western worlds; and to this, no doubt, is to be ascribed the wealth and importance to which she early attained. Being situated between the empires of Rome and Parthia, it was an object of great importance with the Palmyrenians to preserve a strict neutrality, and to keep on good terms with them both. But after the victories of Trajan had established the unquestionable preponderance of the Roman arms, Palmyra became a dependency of Rome, and attained to the rank of a colony. 'It was during that peaceful period, if we may judge from a few remaining inscriptions, that the Palmyrenians constructed those temples, palaces, and porticoes of Grecian architecture, whose ruins, scattered over an extent of several miles, have deserved the curiosity of our travellers.' (Gibbon, cap. 9.)

The most splendid period of the history of Palmyra was that which immediately preceded her fall. Valerian, emperor of Rome, having been made prisoner by Sapor, king of Persia, Odenathus, a citizen of Palmyra, who had attained to the principal direction of her affairs, joined the Roman forces, and had a large share in avenging the insult offered to the majesty of Rome. He attacked the Persians, drove them beyond the Euphrates, penetrated as far as their capital city Ctesiphon, and captured the treasures and women of the great king. For these services, the senate, with the approbation and applause of the Roman world, conferred on Odenathus the title of Augustus, and associated him in the empire with Gallienus. These honours, however, he enjoyed only for a brief period, being soon after (A.D. 263) assassinated by his nephew. The vacant throne was seized by his young, warlike, and beautiful widow, the famous Zenobia, who broke the alliance with the imbecile Gallienus, and assumed the title of Augusta, queen of the East. The accounts that have come down to us of this extraordinary woman are so very flattering that we may not unreasonably suspect them of being exaggerated, with the view, perhaps, of enhancing the merit of her conqueror Aurelian. But, that she was highly accomplished, there can be no doubt. 'Her manly

Digitized by Google

understanding was strengthened and adorned by study. She was not ignorant of the Latin tongue, but possessed, in equal perfection, the Greek, the Syriac, and the Egyptian languages. She had drawn up, for her own use, an epitome of Oriental history, and familiarly compared the beauties of Homer and Plato, under the tuition of the sublime Longinus. The success of Odenathus was, in a great measure, ascribed to her incomparable prudence and fortitude.' (Gibbon.)

Zenobia, who boasted of being the descendant of Cleopatra and the Ptolemies, sent, after the death of her husband, on pretence of this relationship, an army into Egypt, which she annexed to her dominions. But her troops were unequal to a contest with the disciplined legions of Aurelian. After being defeated in two great battles, Zenobia shut herself up in Palmyra. But, seeing that it must fall into the hands of Aurelian, she attempted to make her escape; and being intercepted in her flight, the city soon after surrendered. The victor sullied the glory of his conquest by ordering the execution of Longinus, author of the famous treatise on the 'Sublime,' and other advisers of the unfortunate queen; but, in other respects, the city was treated with great lenity. Unhappily, however, as soon as it was understood in Palmyra that the emperor, with his captive princess, had crossed the Hellespont, the citizens rose in rebellion, and, having massacred the Roman governor and garrison, proclaimed their independence. The instant Aurelian heard of this revolt, he at once, without a moment's hesitation, began to retrace his steps, and hastened to the ill-fated city with an irresistible force, and an insatiable thirst for vengeance. The sequel may be learned from his own words: '*Mulieribus non pepercimus, infantes occidimus, senes jugulavimus, rusticos interemimus; cui terras, cui urbem deinceps relinquemus? Parcendum est iis qui remanserunt.*' (Flavius Vopiscus in Hist. August., p. 218.) At the same time the walls of the city were rased to the ground, and, in the words of Gibbon, 'the seat of commerce, of arts, and of Zenobia, gradually sunk into an obscure town, a trifling fortress, and, at length, a miserable village. Zenobia herself was taken to Rome to grace the triumph of Aurelian, who, however, behaved towards her with a generous clemency seldom exercised by the ancient conquerors, and presented her with an elegant villa at Tibur, where the Syrian queen insensibly sunk into a Roman matron, her daughters married into noble families, and her race was not yet extinct in the fifth century.' (Decline and Fall, ii. 44–48.) Palmyra afterwards fell with the surrounding country under the power of the Mohammedans; but history is entirely silent respecting the causes and period of its total desolation.

PAMIERS, a town of France, dép. Ariège, cap. arrond., on the Ariège; 11 m. Foix. Pop. 7,910 in 1861. The town is well situated, and is generally well built and laid out. The cathedral, several other churches, the bishop's palace, a Carmelite convent, the court-house, and a large civil hospital, are its principal buildings. No remains exist of its castle, built during the Crusades, and called *Apamea*, from the Syrian town of that name, whence, by corruption, the present name of this town.

PAMPELUNA, or PAMPLONA, a fortified city of Spain, cap. kingd. of Navarre, on a hill near the left bank of the Arga, 48 m. S. Bayonne, and 195 m. NE. Madrid, on the railway from Saragossa to St. Sebastian. Pop. 22,702 in 1857. The city is surrounded by a strong wall with bastions, but derives its principal defence from two castles, one within and the other outside the walls, the latter, the citadel, being situated on a rock (of which the only accessible part is covered by a morass), and encircled by a deep ditch. The interior of the town comprises several wide and straight streets, lined on both sides with trottoirs; 3 public squares, in the largest of which bull-fights are held; 6 public fountains, supplied with water from a fine aqueduct 3 m. in length; and the *Taconera*, a public walk. Outside the walls are 3 other planted walks, and 6 bridges across the river, connecting the town with the suburbs. The houses are irregularly built; and the public edifices, which comprise a cathedral, four parish churches, two palaces, a prison, asylum, and small theatre, are more remarkable for antiquity than beauty.

Pampeluna is supposed to have been built by Pompey, after the defeat of Sertorius, and called by him Pompeiopolis. After the foundation of the kingdom of Navarre, it was made its capital city, and sustained several sieges. But the most memorable event connected with the town is the contest for its possession between the English and French at the close of the Peninsular war. In June, 1813, on the sudden retreat of the French army from Vittoria, the road to Pampeluna was alone open, and this fortress was hastily garrisoned and provisioned. It was forthwith invested by the British; but the approach of Marshal Soult, with an army, towards the close of July, promised it an early deliverance. It was in the vicinity of Pampeluna that the obstinate conflicts of the 27th and 29th July took place; and the French being compelled to repass the Pyrenees with great loss, Pampeluna was cut off from all supplies, and surrendered on 31st October.

PANAMA, or DARIEN (ISTHMUS OF), the narrow neck of land which connects the continents of N. and S. America, forming a prov. of the republic of New Granada, between the 8th and 10th degs. of N. lat. and the 77th and 81st of W. long., having E. the Colombian prov. Choco, W. that of Veragua, N. the Atlantic, and S. the Pacific Ocean. Its shape is that of an arc, the convex side facing the N.; length, W. to E. about 300 m.; general breadth about 40 m., but, where narrowest, not more than 35 m. from sea to sea. The Cordillera, or chain of the Andes, is here interrupted by several remarkable breaks of low and level land, through which a line of railway has been laid. The isthmus is extremely well watered, and though without any river of considerable length, several of its streams are partially navigable. The dry season lasts from Dec. to April, and the wet during the rest of the year. The quantity of rain is prodigious; but a very remarkable phenomenon occurs throughout the isthmus, in the height of the rainy season, of which no satisfactory explanation has yet been offered. On the 20th of June the rain ceases for five or six days, and the sun shines out during the whole day with the utmost splendour, nor is any instance known of irregularity in the recurrence of this singular break in the ordinary course of the season. (Geog. Journ., i. 78.) The temperature and salubrity vary greatly. Porto Bello is one of the hottest and most unhealthy places in the world. On the opposite coast, at Panama, the therm. in the rainy season does not rise higher in the daytime than 87°, and though at other times it is very sultry, it can hardly be called unhealthy. Rice, maize, coffee, cocoa, and some sugar, are cultivated. Storax, caoutchouc, various dyeing drugs, and the finest timber trees, abound in the forests.

Near Panama is a considerable extent of cul-

Digitized by Google

tivated land; but round Porto Bello, and on the E. coast, most part of the surface is uncultivated. Elsewhere, the landlords keep their estates chiefly in grass; few of the inhabitants are industrious, and many, indeed, depend almost wholly on the chase. Droves of wild hogs, deer, and a variety of other wild animals are met with; monkeys are frequently used as food, as are sharks and guanas. Horses are small, but hardy; but mules are the favourite beasts of burden.

Gold was formerly obtained in the isthmus, but the search after it has been abandoned for a lengthened period. The pearl fishery, also, which used to be prosecuted in the bay of Panama, has now been all but wholly relinquished. The inhabitants, indeed, are strangers to enterprise and industry, and are said to be less advanced in civilisation than their neighbours.

Passage across the Isthmus.—The road across the Isthmus of Panama has become of immense importance since the establishment, from sea to sea, of a line of railway opened in 1864. The railway, the importance of which can scarcely be exaggerated, is described as follows by Mr. Chas. T. Bidwell, British vice-consul at Panama. (The Isthmus of Panama, London, 1865.) 'The total length of the road is 47 m., 3,020 ft. It runs on the right or easterly bank of the Chagres, as far as Barbacoes, where it crosses the river by a bridge 625 ft. in length, 18 ft. in breadth, and 40 ft. above the main level of the river. This bridge is of wrought iron, and is exactly half way between Aspinwall and Panama; and it is not a little singular that the bridge thrown across the Nile between Alexandria and Cairo is also exactly half way—in other words, both the great isthmus transits are intersected at half their length by a large river. The Barbacoes bridge is of 6 spans, built of boiler-iron, with a top and bottom cord 2 ft. in breadth and 1 inch in thickness, joined by a web of boiler-iron 9 ft. in height at the centre, and 7 at the ends. The rails are laid on iron floor girders 3 ft. apart, and the whole structure is supported by 5 piers and 2 abutments, 26 ft. wide and 8 ft. in thickness, increasing in the proportion of an inch to the foot down to their foundations, which are constructed of piles and concrete. The highest point of the line is 37¾ m. from the Atlantic, and is 263 ft. above the mean level of that ocean. The maximum grade on the Atlantic slope is 1 in 90; on the Pacific descent it is rather more, viz. 1 in 88. Of the road 23⅜ m. are level and 28⅜ straight, but there are some very abrupt curves. There are no less than 134 culverts, drains, and bridges of 10 ft. and under, and as many as 170 bridges from 12 ft. span to 625 ft. span. The line is a single one, but there are four commodious sidings, one at Gatun, 7½ m. from Aspinwall; one near Barbacoes, 22 miles; one at Malachin, 30 m.; and one at the summit, 37 m.

A substantial telegraph is established between Aspinwall and Panama. There are 26 posts to the mile, constructed in the following manner:—A scantling, four inches square of pitch-pine, is encased in cement, moulded in a cylindrical form, tapering towards the top, and sunk four feet in the ground. I was assured that, when once dry, these posts would last for ages. The cost of each was 5 dollars, about 1*l.* sterling. They have the appearance of hewn stone and are quite an ornament along the line. The total expenditure of the Panama Railway Company amounted to 7,407,553 dollars, or rather more than 1,500,000*l.* sterling, which is nearly 32,000*l.* per mile, an expense, by-the-bye, below the average of our English lines, which is 34,638*l.* per mile.'

The port of Chagres is within the mouth of the river of that name, in lat. 9° 18′ 6″ N., long. 79° 59′ 2″ W. A bar at the mouth of the river has only from 10 ft. to 12 ft. water, though within the bar the river deepens to from 4 to 6 fathoms. It is probable that the bar might be deepened without much difficulty, and a canal might be cut from the bottom of the fine bay of Manzanilla to the river, from which it is only 3 m. distant. A short while ago the town (if so it might be called) was a mere cluster of huts, unhealthy, and without any accommodation for passengers. But having become one of the starting points in the nearest and shortest route from the E. to California, it has been greatly improved.

PANAMA, a city and sea-port of New Granada, on the Pacific, 38 m. SE. Chagres. Pop. 18,250 in 1860. The city stands on a rocky peninsula, projecting into the Bay of Panama, and has an imposing aspect from the sea. Its streets are well ventilated, and it is cleaner than most Spanish American cities. It is encircled by irregular and not very strong fortifications, constructed at different periods. The houses are partly of wood, straw, and other fragile materials; but many are substantially built of stone, the larger having court-yards, or *patios*, in the old Spanish style. Its roadstead is one of the finest in the world: there are a number of islands a short distance from the main land, which afford secure anchorage for ships of any burden, and from which supplies of provisions, including excellent water, may usually be obtained. The tides daily rise and fall from 20 to 27 ft., so that it is peculiarly well fitted for the repair and building of ships.

Previously to 1740, when the trade with the Pacific first began to be carried on round Cape Horn, Panama was the principal entrepôt of trade between Europe and W. America. From that period, however, it fell off, and its decay has been peculiarly rapid since the independence of S. America, and the opening of the other ports of the Pacific. But, dating from the discovery of the Californian gold mines, it has again rapidly increased.

Old Panama, founded by the Spaniards in 1518, stood about 3 m. to the E. of the present town. It was destroyed by the buccaneer Morgan in 1670, shortly after which the existing city was commenced.

PANIANY, a commercial town and sea-port of British India, presid. Madras, prov. Malabar, on the Paniany river, 38 m. S. Calicut. It has numerous mosques, being principally inhabited by Moplays, or fishermen of Arabian descent. It exports teak, cocoa-nuts, iron, and rice; and imports wheat, pulse, sugar, salt, catechu, and spices; but the mouth of its river is closed by a bar which only admits boats of small burden.

PAPA, a market town of Hungary, beyond the Danube, co. Wesprim, 82 m. SE. Vienna. Pop. 12,045 in 1857. The town was formerly fortified, and has a large castle belonging to the Esterhazy family. It has numerous colleges; Rom. Cath., Lutheran, and Calvinistic colleges; manufactures of earthenware, glass, and paper, and an active trade in agricultural produce.

PAPAL STATES (THE), STATES OF THE CHURCH, or POPEDOM, an independent country of Europe, occupying part of Central Italy, between lat. 41° and 45° N., and long. 11° and 14° E.; surrounded on all sides, except the SW., where bounded by the Tyrrhenian Sea, by the kingdom of Italy. Area, 4,891 square miles, with 692,106 inhabitants, according to the census of 1862.

The Tiber, the largest river of the Papal States,

Digitized by Google

rises at St. Albonigo in the former grand duchy of Tuscany, now prov. Forli, and runs generally S. or SE., but with a very tortuous course, to within about 25 m. NNE. Rome, whence it flows mostly SSW. to its mouth in the Mediterranean, 15 m. below Rome, after an entire course of about 200 m. Before entering the sea the Tiber divides into two arms, enclosing the small island of *Isola sacra*. At Rome the greatest breadth of the Tiber is only about 400 ft., or scarcely one-third part of the breadth of the Thames at Blackfriars Bridge, and nearly approaching that of the Seine at Paris. It is justly entitled to its ancient epithet *flavus*, being almost constantly loaded with yellow mud, from the crumbling and disintegration of its banks. Its principal affluents are the Topino, Nar, and Teverone on the left or E., and the Chiana on the right, bank. It is navigable for boats to near Perugia. Except the Tiber, no river of any consequence falls into the Mediterranean in this part of Italy. Several lakes are in the Papal States, as those of Bolsena and Bracciano.

Gneiss is met with in various places along the coast. Mountain limestone is frequent, and indeed a large portion of the country consists of calcareous formations; but the region round the cap. is of volcanic origin, and abounds with volcanic products, as sulphur and alum. Rome is principally built of volcanic tufa, which composes the general soil of the Campagna.

The Papal States are situated within the second Italian region. Vegetation is scarcely interrupted at any period of the year. The air in the mountain districts is pure and salubrious; but the Campagna di Roma and the Pontine Marshes are very unhealthy; the latter especially are subject to malaria. The Campagna, in antiquity, was bordered along the shore by dense forests; and it is believed by many, that the destruction of the woods has been a principal cause of the increase of malaria. 'The ancients,' says M. Simond (Tour in Italy, pp. 350–59), 'planted or preserved these woods under an idea, probably erroneous, that they screened them from certain winds carrying noxious vapours; but though mistaken as to their real mode of agency, they were quite right in supposing them useful. To the destruction of the woods the increase of solstitial fevers has been clearly traced, the one having uniformly followed the other. During the decline, also, and after the fall of the Roman empire, those stupendous aqueducts, which in earlier times brought whole rivers to Rome, having been broken and overturned, in some places poured their waters over the land, which became a marsh; and the population, diminished by wars, was further and still more reduced by pestilence. The country became more unhealthy as it was less inhabited; in the course of a few centuries the millions of ancient Rome dwindled down to 30,000; and it was not before the sixteenth century, under Leo X., that the scanty pop. grew more numerous. Another cause of the increase of malaria is that sandy ridge gradually thrown up on both sides the mouth of the Tiber for many leagues; various outlets, natural and artificial, are thus choked up; and hence the Pontine marshes, formerly confined to a narrow space near the promontory of M. Circello, now extend under other names all along the coast.'

The whole of the Campagna is divided into about 600 estates, varying from 500 to 1,000 hectares and upwards each. The largest of these vast estates, which are mostly held in mortmain, belongs to the chapter of St. Peter. The value of land is various; the rent in the Campagna varies from ½ to 4 scudi per hectare. Beyond the maremme, as the pop. increases in density, the rental rises to perhaps 20 scudi per hectare for land on which there are olive, vine, or mulberry plantations, or where there are adjacent markets for corn. In the neighbourhood of Rome, where the land is rented at a fixed price, it readily sells for 40 years' purchase; while lands farmed on the metayer principle do not generally sell, owing to the greater difficulty of collecting the rent, for more than 33 or 35 years' purchase. Lands in the maremme are frequently rented by middlemen, who underlet them in smaller portions to the actual cultivators. But, speaking generally, land is everywhere held under the *metayer* system, the occupier paying a certain proportion, generally a half, of the produce to the owner. The soil is mostly fertile; but, owing to the badness of the government, which oppresses the occupiers with injudicious taxes; the want of capital, skill, industry, and markets; the ignorance of the cultivators, the number of holidays, and the prevalence of the metayer system, agriculture is in the most wretched state. The implements of husbandry made in the country are as rude as those described by Virgil; and heavy custom-house duties prevent the introduction of improved implements from abroad. The cultivated part of the maremme produces wheat, maize, beans, and vines; but the lands often lie fallow for from 3 to 7 years, and not 1 acre in 8 is under the plough or hoe. In the more populous and best cultivated parts there is usually an annual change from spring grasses to corn produce; but by far the greater part of this region is in a state of nature. Formerly all the farms were let with a considerable stock of horses and cattle; but the proprietors, when in want of money, parted with them. In whatever direction the traveller may enter the Campagna from Rome, he would pass over at least from 20 to 30, and frequently from 50 to 60 m., without meeting with a single field cultivated by resident inhabs. In fact, though it embrace an area of 2,560,000 acres, it is not supposed to have a resident pop. of more than 16,000 or 18,000 inhab., mostly wandering shepherds. There is on each estate a *casale*, or large building, where the implements of husbandry are kept; but neither bakehouses nor kitchen gardens exist throughout the whole tract, the labourers being wholly supplied at a few scattered depôts with provisions, sent thither from Rome. The shepherds are in about as depressed a condition as possible; they have a sickly, cadaverous appearance; their clothing consists principally of sheepskins, worn with the wool outside; and they sleep either on the ground in the open air, or in some of the ruins with which the country is strewed. They are paid, not in money, but in cattle pastured with those of the farmer. The harvests in the Campagna are reaped by peasants from distant mountainous districts, who come to it in companies of from 20 to 100 individuals. Even in favourable seasons, ⅓ or ¼ part of their number are attacked by fever; and, in unhealthy seasons, the proportion is much larger. Many die in the hospitals of Rome, or in the Campagna; others perish on the road home; and others, again, return condemned to pass the remainder of their days a prey to intermittent fever, or other diseases brought on by the climate; and yet such is the poverty of the pop. in the mountainous districts, that the chance of realising a few scudi continually tempts new adventurers to undergo the same risks.

In order to arrest the depopulation of the Campagna, Pope Pius VII., in 1802, laid an impost of 5 *pauli* per rubbio on the uncultivated land immediately round the towns, and deducted 5 pauli per rubbio from the tax on cultivated lands. But this attempt to extend industry by fiscal regula-

Digitized by Google

tions necessarily failed. The regulation, which never was acted upon, speedily became obsolete; and the peasantry of the Campagna generally remain in the same condition as before the French invasion.

In the northern, or mountainous, parts of the Papal States, where the country is divided into small farms, and rather thickly inhabited, pease, beans, and kitchen vegetables, which form a large proportion of the food of the peasantry, occupy most part of the land; the remainder being appropriated to wheat and maize. Little skill is evinced in agriculture; the crops being generally raised only for the supply of the cultivators, no one thinks of raising those products for which his land may be the best fitted, till after he has provided an adequate supply of grain or other produce for the use of his family. In the mountains near Rome, white crops are taken from the grounds, for 2 or 3 years successively, without any manure being applied to the land; 3 crops of wheat may be succeeded by maize or kidney beans for 2 years; and once in 5 or 6 years, a crop of hemp or flax is, perhaps, raised. The grain is trodden out by horses, and winnowed by hand, immediately after harvest. The wages of a man in harvest time amount to about 2 pauls a day, with bread and *piquette*, or weak wine; but they are generally higher the nearer the district to the capital. The herdsmen take charge of the cattle belonging to many different persons, and tend them on the mountains, night and day, receiving at the end of the season payment from each proprietor, at the rate of 2 scudi per month for every score of cattle. Besides bread and *piquette*, the food of the peasantry principally consists of cheese from goats' or ewes' milk, onions, garlic, and other vegetables, and *polenta*, a kind of hasty-pudding, made with maize and pulse.

The sugar-cane, indigo, and cotton are cultivated near Terracina, though neither be grown to any great extent. Olive plantations were long among the most productive investments; but they are now less so than those of the white mulberry. The olive is abundant in the S. provs.; and though the Roman oil be badly made, and mostly consumed at home, a million lbs. have occasionally been exported in favourable years. Vineyards are said not to yield returns proportioned to the outlay. The vine is tolerably well cultivated in the vicinity of Velletri, the plants in regular lines being tied to treillages of large reeds; but the most esteemed growths are the light white muscadel wines of Orvieto and Montefiascone, near Viterbo: they do not, however, bear transport well, and are seldom met with out of the country. The timber of the dense forests in the deleg. of Viterbo is not turned to much account from the distance of markets, and is cut principally for smelting iron ore and making charcoal. Cork trees abound in the country about Velletri.

The fisheries on the coast are almost wholly conducted by Neapolitan fishermen. Mining industry is also at a very low ebb. Iron ore is pretty abundant in some places, but only a few traces of other metals have been discovered. Lime, building stone, potters' clay, variegated and statuary marbles, fuller's earth, bitumen, naphtha, and coal are met with; but the last, though under the French it was raised in considerable quantities, is no longer made use of.

Manufactures, though in the most depressed and backward state, serve almost entirely for home consumption. Woollen fabrics are the principal, and include cloths, cassimeres, serges, woollen caps, blankets, and carpets. Hats, silk goods, leather and gloves made at Rome, are among the most prominent manufactures. Roman musical strings enjoy a high and deserved celebrity, and are exported to most countries of Europe.

Commerce.—Notwithstanding the low state of manufacturing industry, high duties are levied on manufactured goods when imported. Woollen cloth, woollen and cotton fabrics, and cambrics, pay 100 sc.: dyed or stamped cottons, 50 sc.; and porcelain, 20 sc. per 100 lbs. The principal seat of the foreign trade is Civita Vecchia.

In the year 1859 the shipping at the port of Civita Vecchia consisted of 1,861 vessels which entered, and 1,822 which cleared, of a total tonnage of 308,410. Of this number only 54 vessels, of 9,869 tons, were under the British flag. Since the year 1859, the commerce of the Papal States has very considerably decreased, both as regards imports and exports. The value of the exports of British and Irish produce shipped to Papal ports on the Mediterranean in the years 1861, 1862, and 1863, was as follows:—.

	1861	1862	1863
British Exports to Papal Ports on the Mediterranean	£82,567	£46,991	£27,095

During the year 1862 there were exported from Rome old paintings to the value of 9,596 scudi, modern paintings to the value of 119,537 scudi, or about 25,000*l.*; ancient sculpture to the value of 532 scudi; and modern sculpture to the value of 188,325 scudi.

Accounts are kept in *scudi* (crowns), = 4*s.* 3½*d.* each, and divided into 10 paoli and 100 bajocchi. The Roman *libbra* or pound of 12 oncie and 288 danari = nearly 12 oz. avoird. The *barile* of wine, of 32 boccali, and 128 fogliete, = about 13 galls.; the barile of oil contains only 28 boccali. The Roman foot = 11·7 Eng. inches; the palmo of architects = about 8¾ inches; the Roman mile = 1628 Eng. yards.

The Government is wholly ecclesiastical, no one being eligible to fill any civil office who has not attained the rank of abbot. The pope enacts all laws, and nominates to all clerical appointments. He is assisted, however, by the High College of Cardinals, comprising about 70 members; and the different branches of the government are conducted each by *Congregations*, with a cardinal at its head. Each leg. and deleg is governed by a cardinal, assisted by 2 assessors, and a council of 4 individuals nominated by the pope, half of whom are changed every 5 years. The jurisdiction of the temporal nobles is retained, but all the judicial offices of the nobility must be confirmed by the pope, and are subject to the general laws. In each cap. of a deleg. there is a tribunal of primary jurisdiction, which also decides in appeal on certain matters that first come before the district officers. The proceedings in these courts are public, but there is no jury. Every town has its own jurisdiction and magistracy, and a municipal council of from 18 to 48 mems., according to the pop. The laws in force are nominally those of the Justinian code; but the pope has power to alter or annul any previous law, and the provincial judges have extensive discretionary powers. Criminal proceedings in the Papal States are very dilatory; and in all cases the accused is thrown into prison, whence there is no liberation on bail. Brigandage is less frequent than formerly; and the government has stationed five military posts along the road from Velletro to Terracina, for the protection of travellers. Still, however, the police and the law are equally defective; and assassinations and other crimes of violence are often taking place without the perpetrators being ever brought to justice.

On the fall of Napoleon I., the alienation of

Digitized by Google

church domains was confirmed; but the compensation since made to their former owners, and the restoration of suppressed churches and convents, have cost the government prodigious sums. There were, in the city of Rome alone, in the year 1863, no less than 54 cardinals, 36 bishops, 1,457 priests, and nearly 5,000 monks and nuns. (See ROME.) It is needless to add that this superabundance of priests, instead of promoting religion and morality, is a principal cause of their low state in the city. The outward deportment of the papal court is however, at present, highly decorous. Those times, so disastrous and disgraceful, when the popes had so many nephews, and those nephews built so many splendid palaces and villas, called by the Romans, in derision, 'miracles of St. Peter,' are now almost as much forgotten in Rome, as the times when horses were made consuls, and eunuchs emperors.

Education.—There are, besides the university, various high colleges in Rome, the principal of which is the Gregorian. (See ROME.) Secondary schools exist in most towns, but there is no general system of elementary instruction, and it has been estimated that only 1 in 60 of the pop. attend public schools. The truth is, that education in the Papal States is in the most degraded state imaginable. It is wholly in the hands of the clergy, and is conducted on the principle of imbuing the pupils with the grossest prejudices, and of proscribing every study or pursuit that might tend to expand or enlighten their minds, or make them acquainted with their rights and duties. The university education, excepting, perhaps, in so far as respects medicine, is altogether contemptible. Even theology is not efficiently taught; and philosophy, politics, and political economy are as little relished in Rome as in Morocco.

The censorship of the press is severe in the extreme, and the gazettes insert nothing unapproved by the censors. The journals, of which there are several, devoted to *Belles Lettres*, antiquities, and the fine arts, being under a less severe surveillance, occasionally display originality and learning: but the literature of the Roman States is, like their government, emasculated and imbecile. 'The Eternal City,' says an English traveller, 'prohibits all the best works on mental philosophy. She has not one eminent man of science; and if she had a Cuvier, or a Buckland, she would not permit him to lecture or to publish his discoveries to the world till they had been subjected to the pruning knife of some ignorant censor. The apathy and timidity, the dread of independent thinking and free inquiry, manifested by the papal government, seems, however, to admit of easy explanation. Its dogmas, its rites, its principles of action were framed in accordance with the opinions of the 12th century. It does make some changes silently, by dropping a few untenable pretensions, but it can make no great and marked change without abandoning its professed character of being the depository of immutable truth. The rulers of Rome, therefore, finding themselves unable to raise up their old institutions to the level of modern knowledge, endeavour to keep down this knowledge to the level of their institutions. They see the props and stays of their system dropping off, and one source of influence failing after another, and their prudence counsels them to shut out, as far as they can, the light which is sapping their authority, and to look upon innovations, even of the most harmless kind, with suspicion. They are religious *Conservatives* in the strictest sense of the term.'

Charitable Institutions.—The Papal States are literally overrun with all kinds of *charitable institutions.* In Rome, especially, the sums expended on charitable foundations are, in proportion to its extent, twice as large as in Paris; so that, as Serristori exclaims, '*Dovrebbe credersi che negli Stati Pontefici e molto più in Roma non esistesse mendicità.*' But nowhere are the pernicious consequences of indiscriminate charity better exemplified than in the Roman States, where mendicity, wretchedness, and want prevail to a frightful extent. The universality of beggary removes all sense of shame, and a large proportion of the pop. are degraded enough to prefer subsisting on alms to making any attempts to provide for themselves.

The *army*, in 1862, consisted of about 15,000 men, with 1,200 horses—a force out of all proportion to the population. The principal fortresses are those of Rome, Civita Vecchia, and Terracina.

The taxes are very heavy, and are imposed in the worst possible manner. The principal consists of a land-tax: heavy duties are also laid on most articles consumed in towns and villages, and all sorts of grain, except rye, maize, barley, and oats, pay a heavy tax when ground at the mill. Salt, tobacco, alum, and vitriol are monopolies in the hands of government. The customs' duties are, however, on the whole, the most oppressive and injurious. The lottery, also, notwithstanding its demoralising influence, is a fertile source of revenue.

History.—The rise of the Popedom as a temporal power dates from 755, when Pepin, king of the Franks, invested the pope with the exarchate of Ravenna; to which Charlemagne added the provs. of Perugia and Spoleto. Benevento was given to the pope by the emperor Henry III. in 1053, and in 1102 the marchioness Matilda, of Tuscany, bequeathed to the holy see the provs. forming the 'Patrimony of St. Peter.' In 1297 Forli and the rest of Romagna, and, in 1364, Bologna, became portions of the papal dominion; and, at the end of the 14th century, the pope acquired full jurisdiction over Rome and Sabina. Ferrara was acquired in 1598, Urbino in 1626, and Orvieto in 1649.

The French invaded the States of the Church in 1797, after which the N. legations were annexed to the Cisalpine republic. In 1798 Rome was taken by the French, and in 1810 the whole of the Papal States were included in the kingdom of Italy. In 1815 most part of the pope's former dominions were restored; but the events of 1859–61, which gave rise to the new kingdom of Italy, again deprived the pontiff of the most valuable provinces under his rule, including the vast districts of the Romagna, Umbria, and the Marches. The territory of the sovereign pontiff, previous to 1859, embraced an area of 17,218 English square miles, with 3,124,668 inhabitants, but has since been reduced to 4,891 English square miles, with 692,106 inhabitants. Of the former twenty 'legations' and 'delegations' into which the territory was divided, only 5 remain, namely, Rome and the Comarca, with 326,509 inhabitants; Viterbo, with 128,324; Civita Vecchia, with 20,701; Velletri, with 62,013; and Frosinone, with 154,559 inhabs. The city of Rome and the rest of the papal territory were occupied by French troops in 1849, which, however, were withdrawn in 1865–6 (see ITALY), according to a convention between king Victor Emmanuel of Italy and the emperor Napoleon III. It is highly probable that before long the whole of the Papal States will come to form part of the Italian kingdom.

PAPUA, or NEW GUINEA, a large island, or rather a dense cluster of islands, in the E. Archipelago, third division; between the equator and

Digitized by Google

the 9th deg. of S. lat., and the 130th and 150th degs. of E. long., having N. and E. the Pacific Ocean, W. and SW. the sea in which Gilolo, Ceram, and the Aroo Isles are situated, and S. Torres Straits, separating it from Australia. It is indented by several deep bays, but its coast-line is in many parts unknown, and its interior has been but little explored. The coast, viewed from the sea, rises gradually into hills of considerable elevation, but there are no mountains of any remarkable height. The whole island, being covered with palm trees and timber of a large size, little can be said respecting its soil, which, however, is presumed to be fertile. The cocoa-nut, the two species of the bread-fruit tree, pine-apples, and plantains are found here: nutmeg trees also grow wild, but it is not known whether they produce good spice. It is said that there are no quadrupeds in Papua, except dogs, wild cats, and hogs; and that to the E. of Gilolo no horned animals of any description are to be found. The woods abound with wild hogs, which the natives kill with spears and bows and arrows, in the use of which they are very expert. Gold is found in the interior of the island. The natives of Papua appear to consist of two distinct races; those in the W. being identical with the negroes of the E. Archipelago, while the inhabs. of the E. part of the island belong rather to the sallow-complexioned long-haired natives of the South Sea Islands. (See POLYNESIA.) The Papuan negroes, of whom a brief notice is given in the art. ARCHIPELAGO, EASTERN, continue, for the most part, in their original state of nakedness and barbarism, devoid of homes or clothing, and subsisting principally on the precarious produce of the chase, or on the spontaneous products of the forests. On the NW. coast, which has been the most frequently visited by Europeans, the dwellings of the natives are raised on posts, as in other parts of the Archipelago and among the Ultra-Gangetic nations of the Asiatic continent. These tenements accommodate many families, who live in cabins on either side of a wide common hall that occupies the centre of the building. The cabins are miserably furnished; a mat or two, a fire-place, an earthen pot, with perhaps a china plate or basin, and some sago flour. As they cook in each cabin, and have no chimney, the smoke issues at every part of the roof, and at a distance the whole building seems to be on fire. Their clothes are very scanty, but they contrive to bedizen themselves so as to attract the attention of European observers. Their hair is not so short, close, and woolly as that of the African negro, and they wear it bushed out round their heads to the circumference of 2½ and 3 ft., and, to make it more extensive, comb it out horizontally, occasionally adorning it with feathers.

The men in general wear a portion of the inner bark of the cocoa-nut tree, resembling a coarse kind of cloth, fastened round the middle; and the women use blue Surat baftas in a similar manner. Boys and girls go entirely naked till puberty. All are fond of glass and coloured china beads, and wear them about their wrist. The women, as generally happens among savages, lead a laborious life, and are often seen labouring hard in fixing posts in the ground for stages, in making mats, or in forming pieces of clay into earthen pots, while the men are sauntering about.

In the interior the inhabs. practise gardening and some sort of agriculture, supplying the inhabs. on the coast with food, in exchange for axes, knives, and other coarse cutlery. The natives on the coast purchase these from the Malays and the Chinese, particularly the latter, from whom they also buy blue and red cloths. In exchange the Chinese carry back missoy bark, slaves, ambergris, sea slug (*biche de mer*), tortoise-shell, small pearls, birds of paradise, and many other species of dead birds, which the Papuas have a particular method of dressing.

The Dutch have some trade with Papua; but little intercourse takes place between it and the British settlements in Australia, Singapore, or elsewhere in the East. The inhabs. of the more westerly islands of the E. Archipelago buy the Papuans for slaves; and the natives of the W. coast of Papua make slaves of those of the E., and sell them to strangers. With a similar view, they were formerly, and still are, accustomed to assemble in great numbers, and make war on the inhabs. of Gilolo, Ceram, Ambloo, and other islands still farther W.

The Arabians, in their early voyages, appear to have come into contact with the Papuans, whom they constantly describe as cannibals. Papua was discovered by Europeans in 1511, and frequently resorted to by the Portuguese during the 16th century. Towards the end of the 18th century, Forrest, McCluer, and other British navigators visited it, since which it has been but little noticed.

PARA, formerly called *Belem*, a city and seaport of Brazil, cap. prov. of same name, at the confluence of a considerable river with the great estuary of the Tocantins, or Rio Para, on its S. side, opposite the island of Joanes or Marajo, estimated about 60 m. from the Atlantic, and 300 m. WNW. Maranham; lat. 1° 30′ S., long. 48° 22′ 33″ W. Pop. estimated at 20,000, incl. comparatively few negroes. It stands in a fertile plain, and is one of the finest Brazilian cities, its streets being straight, and the houses almost all of stone, and both solid and elegant. The cathedral and governor's palace are said to be magnificent edifices. There are several other churches, but only two convents appear to exist at present, that of the Mercenarios having been converted into barracks, and the Jesuits' college into the episcopal palace and seminary. Para has a judicial tribunal, royal college, botanic garden, hospital, theatre, and arsenal.

The harbour is confined, and is said to be diminishing in depth; the approach from the ocean is also rather difficult, and it is always expedient to take on board a pilot at the mouth of the estuary. The principal articles of export are cocoa, of which it exports above 35,000 bags; caoutchouc, of which it is the principal mart; with isinglass, rice, drugs, and cotton, amounting in all from 150,000*l.* to 170,000*l.* a year. The sugar grown in the neighbourhood is bad, the soil not being favourable for the cane. The communication with Great Britain is principally with Liverpool. Ships of war have been built here; and timber used to be exported to Lisbon for the use of the arsenals. The climate of Para is very hot, and thunder storms occur almost daily. It was formerly deemed very unhealthy, but in this respect it has latterly been materially improved.

PARAGUAY, an indep. state of S. America, principally between the 21st and 27th degs. of S. lat., and the 54th and 58th of W. long.; having N. and E. Brazil; SE. and S. the territory of La Plata; and W. the latter repub. and Bolivia. Shape nearly oblong; length N. to S. about 460 m. Estimated area, 73,000 sq. m. Pop. 1,337,431, according to an enumeration made in the year 1857. The inhabitants are composed of whites of Spanish descent, native Indians, negroes, and mixed races originating from the foregoing, those of the Indo-Spanish descent greatly preponderating. Paraguay is an inland peninsula, inclosed E. and S. by the Parana and its tributary the Ya-

Digitized by Google

juari, and W. and NW. by the rivers Paraguay and Blanco. A mountain chain, the Sierra Amambahy, enters Paraguay on the N., runs through it, near its centre, to near lat. 26°, and then divides into two branches, inclosing the basin of the Tibiquari. From the undivided chain many rivers flow on either side to join the Parana or Paraguay; but none of them require any special notice, though in the rainy season they are all swollen so as to inundate a considerable extent of country. There is but one lake, that of Ypao, worth mention; extensive marshes, however, abound in the W. The climate is temperate, but damp. Paraguay, in point of fertility, forms a favourable contrast to the adjacent parts of the Argentine republic. It is well wooded, and diversified with undulating hills and verdant vales. Mr. Robertson, who entered it at Neembucú, states (Letters from Paraguay, i. 259), 'I was glad to meet with much more frequent traces of cultivation and industry than were to be found in the solitary tracts over which I had heretofore sped my monotonous way. Whitewashed cottages often peeped from among the trees, and around them were considerable fields of the cotton, yucca, and tobacco plants. The Indian corn and sugar-cane were also frequently to be seen in the vicinity of the farmhouses of a better character than the cottages; and there was abundance of wood and of the prickly pear. With the latter, the cultivated country, as well as the potreros or paddocks, were invariably well fenced.'

Almost half the entire territory is national property. It consists of pasturage lands and forests, which have never been granted to individuals, the estates of the Jesuit missions, and other religious corporations, and a great number of country houses and farming establishments confiscated by the late dictator, Francia. Francia paid great attention from the commencement of his reign to the improvement of agriculture, and to rendering the government property productive; and, by so doing, created a branch of revenue which, aided by time and a wise government, may be found sufficient of itself for all the wants of the state. He let a part of these lands at a very moderate rent, and for an unlimited period, under the single but indefinite condition, that they should be properly cultivated, or turned into pasturage. On other parts of these lands he established large farms, where thousands of cattle and horses are bred. These supply the cavalry with horses, and the troops with provisions, besides which, they also furnish great numbers of oxen for the consumption of the capital. For these the dictator required a high price, and would allow no one to undersell him. The farming establishments were objects of peculiar solicitude to him, and every month the master herdsmen were obliged to make a detailed report concerning them. (Reugger and Longchamp's Reign of Francia in Parag., 174–6.)

The arbitrary measures of Francia certainly produced a salutary result on farming economy at large throughout Paraguay. Before the establishment of his sway, the farmers never thought of cultivating any article beyond tobacco, the sugar-cane, and yucca-root; while the gathering of the matè or Paraguay tea engrossed almost all hands. In 1820, an extent of country, 80 leagues in circumference, was devastated by locusts, and a famine impended over the inhabs. To avert this, the dictator compelled the proprietors to sow a second time a large portion of the land which had been laid waste, and the harvest that followed was most abundant. On the complete success of this experiment, Francia determined to extend his measures to the whole country, so that, ultimately, every farmer was under the necessity of employing himself in that particular branch of agriculture which the dictator pointed out. By these violent regulations, which perhaps were, at the outset, the best suited for the country, a total change in its rural economy was produced; it is no longer customary to import common necessaries from Buenos Ayres and the adjacent provs. The migration of the rural pop. has been forbidden. Rice, maize, yucca, kitchen vegetables, are now cultivated on a more extended scale; and the growth of cotton, which had formerly been wholly received from Corrientes, suffices for the consumption. The breeding of horses and horned cattle has been equally encouraged; and instead of receiving cattle from Entre-Rios, as previously, the farmers have now a surplus stock. The prohibition to interfere with the forests, and the total suspension of the intercourse between Paraguay and other countries, contributed very much to produce these results, as they turned to the cultivation of the soil all the industry which used to be applied to navigation, the cutting down of timber, and the collection of the *yerba matè*.

The latter, or Paraguay tea, is the leaf of the *Ilex Paraguayensis*, an evergreen about the size of an orange-tree, growing wild and in great abundance in the dense forests in the N. and E. provs., to which the natives resort in great numbers for its collection. It is difficult to penetrate the country where it is found; but the profits derived from the article are ample, Paraguay tea being in as general demand throughout La Plata, Chili, and many parts of Peru, as the teas of China are in Europe. Its collection is undertaken by merchants in Assumption, who each employ a master-workman or *abilitador*, and from about 20 to 50 peons, the master providing axes, knives, tobacco, mules, bulls for slaughter, and other provisions, with money advanced to him by the merchant. The boughs of the *yerba*, with the leaves attached, are first hewn down and scorched; the leaves being then roughly removed, and dried by being placed over a wide arch of woodwork, underneath which a large fire is kindled; and, together with the small twigs, they are afterwards ground to powder by a rude wooden mill. The tea is next weighed and stored by the overseer, who pays the peons for it, at the rate of 2 rials or 1*s.* each arroba of 25 lbs. It is next rammed tightly into bags of bull's hide, which are left to dry in the sun, and contain from 200 lbs. to 220 lbs. each, and in this state it goes to market. Mr. Robertson estimates that for six months' work the peon may obtain about 57*l.* in wages; but he has run in debt to his master perhaps 12*l.* before entering the woods, and as much more while employed there, for neither of which sums he has got half the value. Of the remaining balance of 33*l.*, he spends perhaps 12*l.* in ornaments for his horse, 5*l.* more in personal decorations, and the rest in gambling, to which all are very much addicted. 'In a month the peon re-sells his horse-furniture and personal apparel; and in a fortnight after that he is left without a farthing; and in a week more he is to be found again naked in the *yerbales*.' (Robertson's Letters, i. 134–150.)

Manufactures received a considerable impulse from the dictator's prohibition of foreign commerce. The people had previously imported cotton, woollen, and almost all other manufactured goods; and there used to be no such thing as a good workman in Paraguay. But the exercise of ingenuity was excited, not only by necessity, but by terror. The dictator caused a gibbet to be erected, and threatened a poor shoemaker to hang him up, because he had not made some belts of the size he required; and once he sentenced an unfortunate smith to

Digitized by Google

hard labour, because he had improperly placed the *sight* of a cannon. (Reugger, &c., p. 50.)

Francia, next to personal aggrandisement, appears to have been actuated by the short-sighted policy of wishing to render Paraguay dependent solely on her own internal resources, and wholly unconnected in any way with any other S. American state. Except in special cases, he permitted no ingress or egress of individuals or merchandise to or from Paraguay. While Paraguay remained a Spanish prov., the yearly value of its exported produce fell little short of 1,500,000 dols. 8,000,000 lbs. Paraguay tea were annually sent to Santa Fé and Buenos Ayres, besides 1,000,000 lbs. tobacco, large quantities of timber, cotton, sugar, molasses, and spirits. But the only trade, if so it may be called, which has been carried on of late years, was on account of the government. The total exports from Paraguay to the United Kingdom amounted to 1,764*l.* in 1862, and the imports, in the same year, to 1,825*l.* In each of the years, 1859, 1860, 1861, 1863, and 1864, the imports as well as the exports were *nil.*

The government of Paraguay is nominally republican. It approached, under Francia, as near to an absolute despotism as can well be conceived, the dictatorship of Sylla in ancient Rome being the only model with which it may be compared. The state has a so-styled congress of several hundred members; but the entire power is centred in the dictator, who is not only commander-in-chief, but head of the church, the law, and every other branch of the administration. The country is divided into 20 sections, or *commandancias*, exclusive of a territory in the SE., called the Missions, occupying 600 sq. leagues, and governed by a special officer. Besides Assumption, the cap., there are but 4 towns in Paraguay, the other collections of houses being mere villages. During the reign of Francia, there was no law save what was dictated by the caprice of the dictator; and his punishments were as barbarous as his policy was tyrannical and oppressive. The military force in 1865—when Paraguay got involved in war with the combined powers of Brazils, Uraguay, and the Argentine republic—amounted to above 50,000 men, said to be well-disciplined and warlike. The amount of the public revenue is uncertain: it is derived from state property, the greater part of which has been confiscated; tithes in kind upon all articles of produce, the right to levy which is sold each year to the best bidder; taxes upon shops and store-houses in the cap.; the *droit d'aubaine*, or right to the property of all foreigners dying in Paraguay; fines, postage, sale, stamp, and commercial dues. The principal state expenditure is for war-stores, and the support of the army. There is no public debt. Public education is not much encouraged; but there are many primary schools for male children, and, according to Reugger and Longchamps, 'it is a rare occurrence in this country, where no printing-press exists, to find a man who cannot read and write.'

Paraguay was discovered, in 1526, by Sebastian Cabot. The Jesuits afterwards established many missions in the S. part of the country; and were supposed to have effected astonishing improvements in the condition and habits of the natives; but no sooner had they been expelled in 1768, than the fabric they had been so long in raising fell straightway to pieces, and the Indians relapsed into their former barbarism. In 1776 Paraguay became a prov. of the viceroyalty of Buenos Ayres. In 1810, the Buenos Ayres revolutionary troops were defeated by the Paraguayans; but the latter soon afterwards deposed their governor, and, in 1813, proclaimed Paraguay a republic under two consuls. In 1814, the second consul, Dr. Francia, found means to get himself made sole dictator for 3 years, and, at the expiration of that term, for life. In 1826, Francia declared Paraguay independent, and its independence was formally recognised by the emperor of Brazil in 1827. In 1841, General Lopez, elected president, succeeded to Francia; and he, in his turn, was succeeded by his son, Don Francisco Polano Lopez, in 1862. In 1865, as already stated, Paraguay became involved in war with Brazil, Uraguay, and the Argentine Republic, in which the army, under President Lopez, displayed a high degree of valour.

PARAMARIBO. See GUIANA (DUTCH).

PARGA, a fortified town and sea-port of European Turkey, in Albania, sanjiak Delvino, on the Ionian Sea, near the mouth of the Fanar (an. *Acheron*), 48 m. SW. Yannina, and 13 m. E. Paxo; lat. 39° 15′ 45″ N., long. 20° 24′ E. Pop. estimated at 4,000. The town is built amphitheatrewise on the side of a steep rock, surrounded on three sides by the sea, the summit of which is crowned by an almost impregnable fortress, commanding a magnificent view of the surrounding coast and country. It is surrounded by strong walls, and has a double harbour. The streets are narrow, steep, and dirty; it has no public buildings of importance, and many of the houses are in ruins. The inhabs. export oil, tobacco, different kinds of fruit, and some tolerably good wine, all being the produce of the fertile and well-watered tracts surrounding the town. Sir J. C. Hobhouse states that the Pargiots were among the worst of the Albanians, and that their connection with the Christian states had taught them only the vices of civilisation without diminishing their ferocity. (Albania and Turkey, p. 169.) The opinions of General Campbell and Colonel Leake are much more favourable; and Colonel de Bosset, who had excellent opportunities of estimating their character, pronounced them to be spirited and independent, though at the same time temperate, docile, and, if well treated, easy of command. The Albanians, however, mostly withdrew from the town on its being ceded to Ali Pacha, and the present inhabs. are principally Turks.

Parga is hardly mentioned in history until 1401, when it entered into an alliance with Venice, which continued nearly four centuries, until the subversion of the latter in 1797. Parga, being independent of Ali Pacha, tyrant of Albania, afforded an asylum to refugees from his violence, and was the seat of frequent cabals against his government; so that it became an object of importance for him to annex it to his dominions. In 1814, it was besieged by Ali, but being assisted by the British in Corfu, Ali was obliged to give up the siege, and the Pargiots had reason to believe that they would be incorporated with the republic of the Ionian Islands. The British government did not, however, agree to this arrangement: they felt the importance of Parga to Corfu; but the dread of continued dissensions with the Albanians led to a negotiation for its surrender, on Ali paying a pecuniary indemnity to such of the inhabs. as should refuse to remain after a change of government In consequence of this agreement, which was severely, and perhaps justly, censured, most of the Pargiots withdrew to the Ionian Islands; and Ali had to pay, in all, about 200,000*l.* by way of compensation. The cession took place in 1819.

PARIS (an. *Lutetia* or *Lucotecia*), a celebrated city of W. Europe, the metropolis of France, in the dép. of the Seine, of which, with its suburbs, it occupies the largest portion, on the Seine, about 110 m. (direct dist.) from its mouth, 210 m. SSE. London, and 159 m. SSW. Brussels; in the centre

Digitized by Google

of the network (*réseau*) of French railways. Pop. 1,500,129 at the census of 1861, and calculated, from the return of births and deaths, to amount to 1,667,841 on the 1st of August, 1865.

The city stands in a plain, surrounded on several sides, but especially N. and NE., by considerable eminences; and the geological constitution of the district is so peculiar that the French geologists have called it the Paris basin, in the same way that the English have called the tertiary formations near the English metropolis, the London basin. Here are found alternate strata, abounding with marine and freshwater shells, and containing also many fossil remains of extinct animals. Gypsum (known in England as *plaster of Paris*) is found in large quantities; and S. of the Seine is quarried good building-stone, of which, indeed, some of the principal edifices of Paris are formed: the older quarries, all of which were subterranean, have been converted into catacombs, or repositories for the bones of the dead, removed from the public graves that once abounded, greatly to the injury of the health of the city.

Paris, like London, is situated on both sides a considerable river, which runs through it from SE. to NW., and divides it into two parts, of which the largest is on the N. side; the most ancient part of the city being, however, confined to the small islands within the channel of the river. In the course of centuries it has so extended itself, that it now occupies an area of about 14 sq. m., including the Champs Elysées, and other open spaces at its W. extremity. Many of the best streets are parallel to the river, and the open spaces, or quays along its banks, present an agreeable feature of which London is almost wholly destitute. A few of the streets more recently built are wide, and lined on each side with trottoirs; but, generally speaking, the streets are narrower, and less regular, than those of the British metropolis. The style of building, however, in the best streets, is probably superior to that of London. 'The houses are very high, and many of them comprise 7 stories, including the ground-floor; for there are *no sunk stories*. All the tenements have rich heavy cornices one story below the roof, and the fronts are invariably coated with plaster, and repainted from time to time. The town has, therefore, in its better parts, a gayer and handsomer appearance than London; but, internally, the houses (which are of great extent, inhabited by many families, and, in some cases, formed round internal courtyards, accessible by porte-cochères) want the many comforts and conveniences which are found in English houses.' (Maclaren's Notes, p. 12.) As in London, the fashionable part of Paris is at its W. end, while the districts of an opposite character are mostly in the E. and S. The boulevards, a succession of open, circular roads, similar to the 'Circular Road' which surrounds Dublin, encircle the more densely peopled portion of the city. They occupy the site of the old fortifications built in the reign of Louis XIII., are from 60 to 70 yards in width, and, being planted with trees, form agreeable places of resort for all classes of the inhabs.

The city was originally divided into 4 quarters (*quartiers*), but as it increased, new allotments became necessary, though the old name was retained; and hence we find that there are at present 80 quartiers. For electoral and municipal purposes, however, Paris is divided into 20 arrondissements, each comprising 4 quartiers. 'Paris,' observes Sir H. Lytton Bulwer (France, Social, Lit. and Pol., i. 44), 'is divided into quarters as well by its manners as it laws; and these different districts differ as widely one from the other in the ideas, habits, and appearance of their inhabs. as in the height and size of their buildings, or the width and cleanliness of their streets. The Chaussée d'Antin breathes the atmosphere of the Bourse, and the Palais Royal is the district of bankers, stock-brokers, generals of the empire, and rich tradespeople; and it is the quarter fullest of life, most animated, most rife with the spirit of progress, change, luxury, and elegance. Here are all the fine buildings, arcades, and shops, and here are given the richest and most splendid balls. How different is the quartier St. Germain, the district of the long and silent street, of the meagre repast, and the large, well-trimmed garden, of the great court-yard, of the broad and dark staircase, inhabited by the administrations and the old nobility, manifesting no signs of change, no widening of streets, no piercing of arcades or passages: it hardly possesses a restaurant of note, and has but one unfrequented theatre. Further E., on the same side of the Seine, is the quartier of the students, at once poor and popular, inhabited by those eloquent and illustrious professors who give to France its literary glory. Then there is the Marais, the retreat of old-fashioned judges and merchants, where the manners have been changed almost as little as the houses by the philosophy of the 18th century: here are no carriages, no equipages; all is still and silent; you are carried back to the customs of the grand hotels in the time of Louis XIII. Then there is the Faubourg St. Antoine, the residence of those immense masses that reigned under Robespierre, and which Napoleon, after Waterloo, refused to summon to his assistance. And behold the ancient city of Paris surrounded by the Seine, and filled by a vast and wretched population; there, proud amidst the sordid roofs around them, rise the splendid towers of Notre Dame, that temple of the 12th century, which, in spite of the Madeleine, has not been surpassed in the 19th; there is the Hôtel Dieu, the antique hospital as old as the time of Philip Augustus; and there is the Palais de Justice, where sat the parliament of Broussel, remarkable in the chronicle of De Retz.'

Barrières and Boulevards.—Paris, as defined in the reign of Louis XVI., was of an irregular oval shape, its greatest length from NW. to SE., being 4½ m., and its greatest breadth from the Barrière de la Villette northward to the Barrière d'Enfer southward about 3¼ m. The barrières which enclosed this old Paris were taken away at the commencement of the reign of Napoleon III., and the confines of the great city removed to the enclosure of the new fortifications, erected under king Louis Philippe, 1840–48. The immense changes made by the emperor Napoleon III. in the outer aspect of Paris, involving the destruction of a great part of the old city and the erection of a new and far more splendid one on its ruins, are chiefly marked in these vast thoroughfares, which form the characteristic feature of Paris, known as the Boulevards. The Boulevards owe their origin to the improvements that took place in Paris under Louis XIV., when the ancient fortifications of the city were destroyed and the ditches filled up. At the suggestion of Colbert, the king determined to form a wide road upon the side of the northern ramparts, and plant it with trees; and, in 1670, the Boulevard, or bulwark, from the Rue St. Antoine to the Rue St. Martin was opened for public use. Gradually this fine thoroughfare became extended, but it was not until the reign of Napoleon III. that the girdle of boulevards, surrounding the immense city on all sides, was entirely completed.

The boulevards, though forming one uninter-

Digitized by Google

rupted road, are distinguished by various names, in the different sections. The principal line runs from the Bastille to the Madeleine, and is about three miles long. The Boulevard Beaumarchais, named after the well-known dramatist, comes first. The next, the Boulevard des Filles-du-Calvaire is called after an old convent. The Boulevard du Temple has recently undergone a transformation. The second-rate theatres, which were its distinctive feature, and which gained for it the title of 'Boulevard du Crime,' on account of the murders and burglaries which were represented on their boards, have disappeared in order to make way for the new Boulevard du Prince Eugène. At the end of this boulevard is the Rue du Temple, leading to the Temple and Hôtel-de-Ville and the Rue du Faubourg du Temple, one of the oldest streets in Paris. Next comes the Boulevard St. Martin, at the east end of which is the new Caserne du Prince Eugène, at the junction of the Boulevard du Prince Eugène and the Boulevard de Magenta. A little beyond is the handsome fountain of the Château d'Eau, with spouting lions and an encircling square. The Porte St. Martin marks the limit of the boulevard. It was erected in 1674 by the city of Paris in honour of Louis XIV., and is 54 feet high by 54 wide. The bass-reliefs represent the capture of Besançon, the defeat of the Triple Alliance, the taking of Limbourg, and the overthrow of the Germans—all achievements of the 'Grand Monarch,' who is portrayed as Hercules with a long peruke. In 1848, there was desperate fighting at this spot. The Boulevard St. Denis, the shortest of the whole series, separates the Boulevards Sebastopol and Strasbourg and the Rue St. Denis and Faubourg St. Denis. It was along the latter that the patron saint of Paris took his celebrated walk with his head under his arm, and that the sovereigns of France used to pass on their return from being crowned at St. Denis. Moving westward the boulevards gradually become more fashionable, both in the character of the shops and houses, and of the people who traverse them. The Boulevard Poissonnière exhibits the first marked indications of the change, which is fully developed in the Boulevard des Italiens. From hence to the Rue de la Paix are to be found the richest and most brilliant *magasins*, the finest equipages, and the most aristocratic loungers. The Boulevard de la Madeleine, still further west, is remarkable for its elegant houses, and the magnificent edifice from which it derives its title. The new Boulevard Malesherbes here branches off towards the Park of Monceaux and the exterior boulevards which form a second circle round the inner ones.

Principal Streets, Places, and Parks.—The leading street of Paris, corresponding with the Strand or Oxford Street of London, is the Rue St. Honoré, running westward from the Marché des Innocens, and forming, with its continuation, the Rue Faubourg St. Honoré, a line of streets very nearly 2 m. in length. The houses in this faubourg are large and handsome, belonging chiefly to the higher classes; but those in the part nearer the centre of the city consist principally of shops and residences of persons in trade. The Rue St. Honoré is connected eastward with the Rue St. Antoine, terminating in the Place de la Bastille, in which is the model of the projected Fontaine de l'Eléphante. These streets nearly intersect the capital from WNW. to ESE., and the continuous line measured from the Barrière du Route westward to the Barrière du Trône eastward, is exactly 5 m. in length. From N. to S. runs another and almost equally important avenue, formed N. of the Seine by the Faubourg and Rue St. Martin, crossing the river and Isle of Paris by two bridges, the part S. of the river consisting of the Rue and Faubourg St. Jacques, terminating in the Barrière d'Arceuil, from which to the N. end of the line at the Barrière de la Villette is a distance of 3¾ m. The Rue St. Denis runs parallel to the Rue St. Martin, connecting the Pont-au-Change with the N. Boulevards at the Porte St. Denis; and more westward, running in the same direction, are the Rue de Richelieu, Rue de Castiglione, and Rue de la Paix connected with the Place Vendôme, the Rue de Luxembourg, and the Rues Royale and Tronchet, which run into the square containing the church of La Madeleine. These again are crossed by other streets running from W. to E., the principal being the Rue St. Augustin, which connects the Bourse with the Boulevard des Capuchins; and opposite to the Gardens of the Tuileries is the Rue de Rivoli, a noble well-paved street, bordered on its N. side by government buildings and fine hotels: it is about ¾ m. in length, and lined throughout its whole extent with colonnades. The chief streets S. of the Seine and parallel to its banks are in the Faubourg St. Germain, comprising the Rue de Grenelle, a handsome avenue lined with several large and handsome government buildings, the Rue St. Dominique, Rue de l'Université, and Rue de Bourbon, the last running close to and in a line with the Quai d'Orsay. Some of the streets at the E. end of Paris are narrow and irregularly built, although vast improvements have been made even in this district within the last few years, and immense blocks of houses pulled down to make room for new and larger roads. The Quartier Latin, S. of the Seine, comprises several collegiate edifices; but the streets are confined. The quarters of the Tuileries, the Place Vendôme, and the Chaussée d'Antin, are the most favourable districts N. of the Seine; but the houses, or *hôtels*, of the higher classes are chiefly in the Faubourg St. Germain.

Besides the streets just mentioned, Paris has about a hundred squares, or *places*, the principal of which are—1. the Place de la Concorde, an open space W. of the garden of the Tuileries, in the centre of which is the obelisk brought from Luxor, in Egypt, 99 ft. 3 in. in height, inc. its pedestal; 2. the Place Vendôme, an octagon surrounded on three sides by handsome buildings, with Corinthian fronts, and having in its centre a noble column, formed on the model of that of Trajan at Rome, covered with bronze castings, representing the achievements of the grand army in 1805, and surmounted by a statue of Napoleon; 3. the Place des Victoires, originally formed in 1685, and having in its centre an equestrian statue of Louis XIV. on a marble pedestal, with bass-reliefs; 4. the Place de Grève, where public executions were formerly carried into effect, and having on one side the Hôtel de Ville; 5. the Parvis Notre Dame, in front of the cathedral of that name, and having on its S. side the Hôtel Dieu; and 6. the Place de la Bastille, in the Faubourg St. Antoine, occupying the site of the Bastille destroyed 14th July, 1789: in its centre is the Colonne de Juillet, a large Composite column, erected in commemoration of the revolution of 1830, 163 ft. in height, surmounted by a colossal figure of the Genius of France. Paris has also a vast number of fountains, communicating by pipes with the Seine and the Canal de l'Ourcq: some of them, as the fountains of S. Sulpice, St. Eustache, Grenelle, the Château d'Eau in the Boulevard de Bondi, and that in the Marché des Innocens, are worthy of notice from their architectural beauty; though the supply of water from them is not only insufficient, but of bad quality. In consequence of the great depth

Digitized by Google

to which the *calcaire grossier* of the Paris basin penetrates, there are no springs in the city itself, though aqueducts bring pure water from a distance; but pipes, leading as in London to each house, are of very modern date, and only partially introduced.

Exclusive of several handsome gates and barriers, Paris has four splendid triumphal arches; those of St. Denis and St. Martin in the N. Boulevards, erected in honour of Louis XIV.; the Arc du Carrousel, forming the principal entrance to the palace of the Tuileries, built in 1806 on the plan of that of Septimius Severus at Rome, being 60 ft. in width by 45 ft. in height; and the Arc de l'Etoile, at the W. end of the Avenue de Neuilly, commenced by Napoleon I. in 1806, and completed by Louis Philippe. The latter is a most magnificent monument, and is, indeed, by far the most stupendous structure of the kind ever erected, either in ancient or modern times. It consists of a single arch 96½ ft. in height, 48 ft. in width, and 73 ft. in depth, and of two smaller transverse arches; the whole structure being 147 ft. in length by 73 ft. in depth, and 162¾ ft. in height. It stands separate from any other building, so that it is seen to the best advantage. It has numerous colossal groups of sculpture, depicting most of the great battles gained by the French during the revolutionary war. The effect of this prodigious structure is grand in the extreme, and is worthy the genius and magnificence of its founder.

Contiguous to the Arc de l'Etoile is the Garden of the Tuileries, an enclosed space of sixty-seven acres, laid out by the celebrated Le Nôtre in broad walks and angular beds, and profusely ornamented with vases and statues. It is a favourite resort of the Parisians, and is separated by the Place de la Concorde from the Champs Elysées, an open space about 1,000 yds. in length by 400 yds. in breadth, planted by Colbert in 1670, with pavilions along the sides provided with seats and entertainments. These parks, for so they may be called, constitute with the Avenue de Neuilly the Hyde Park of Paris, and, like it, are thronged on Sundays and festival days. Nearly connected with the Champs Elysées is the Bois de Boulogne, an equally favourite resort of the Parisian public. Once a vast and dense forest, the Bois de Boulogne, as late as the end of the last century, was a well-stocked game preserve, in which the kings of France were in the habit of hunting. The plantations suffered from the Revolution and otherwise; but the first Napoleon repaired much of the damage, and the Emperor Napoleon III. tastefully improved the park, and had it laid out with spacious shady avenues, winding walks, and artificial lakes, rendering the whole a scene of exceeding beauty and attraction. The larger of the two lakes contains two islands. Boats ply on these lakes, and transport the visitor from one side to the other, or to the Swiss châlet on one of the islands. The margin of the lakes offers an agreeable prospect, and being amply furnished with seats, is much frequented. S. of the Seine is the Champ de Mars, an oblong space bordered by a double avenue of trees, and used for reviewing troops, and horse-racing. It was the scene of the celebrated *Fête de la Fédération*, 14th July, 1790, as well as of the Champ de Mai during the 100 days. Several minor gardens are dispersed in the different fauxbourgs; besides which, near the E. and W. suburbs respectively, are the Parc de Vincennes, about 2½ m. in length by 2 m. in breadth.

Palaces and Government Buildings.—Paris contains several palaces. The Louvre has not been the residence of a French monarch since the minority of Louis XV., and is now formed into a national museum and picture gallery. The Palais Royal, built by Cardinal Richelieu, and the favourite abode of Louis XIII. and Anne of Austria, consists partly of shops, cafés, restaurateurs, and estaminets, crowded at all times, day and night, by almost every class of the Parisians. A wing of the Palais Royal became the residence, after the year 1851, of Prince Napoleon, cousin of the emperor Napoleon III. The Palais du Luxembourg, built for Marie de Medici, widow of Henry IV., was devoted to the use of the Chamber of Peers, under king Louis Philippe, but has since been chiefly appropriated as a museum and picture gallery. The palace of the Tuileries, erected in the 16th century, on the site of a manufactory of tiles (*tuiles*, whence its name), was greatly enlarged by Henry IV., Louis XIII. and XIV. Additions have since been made to it by Napoleon I., Louis Philippe, and, most of all, by Napoleon III. Its architecture is of a mixed character; but the earlier parts may be taken as a good specimen of the revived Italian style. Wings spread from the main building towards the Place du Carrousel, connecting it with the Louvre; on the garden side are arcades extending through the central portion of the building, at the sides of which are handsome pavilions formed into state apartments, remarkable for their lofty windows, flanked by Corinthian pilasters. The general effect is extremely grand, especially on the garden side; but its grandeur results more from its great length and the variety of outline it presents, than from any excellence or congruity in the details. The state-rooms are on the first-floor, running the whole length of the garden-front, the principal being the Salle du Conseil; the state dining-room, known as the Galerie de Diane, from which other rooms lead to a vast saloon, and state ball-room in the centre of the building, called the Salle des Maréchaux, adorned with portraits of the marshals of France, and one of the finest rooms of the kind in Europe. The court of the Tuileries, on the E. side of the palace, was formed chiefly by Napoleon I., and forms a wide space, separated by an iron railing from the Place du Carrousel, and used for the inspection and review of the troops on duty in Paris. S. of the Place du Carrousel is the long gallery of the Louvre, connecting it with the Tuileries. The pictures are deposited in a splendid range of rooms on the first floor facing the river, above ¼ m. in length; but nearly the whole interior of the palace, which forms a hollow square, is appropriated to the reception of museums and galleries, which will be subsequently noticed. A portion of the basement story, however, in the S. wing, is divided into apartments for the residence of officers and attendants. As respects its external architecture, the Louvre is undoubtedly one of the finest structures in Europe. Its E. front, facing the Place de Louvre, consists of a magnificent colonnade formed by 28 coupled Corinthian columns, rising above the basement story, and surmounted by a beautiful cornice and line of balustrades. The S., or river front, though much less ornamented, is still extremely handsome, being faced with 40 Corinthian pilasters, above which rise a balustrade and central pediment; the N. and W. fronts are quite plain, and form a striking contrast to those just described. The internal courtyard of the Louvre is a perfect square, each side being 400 ft. in length. The buildings surrounding it are of the Corinthian and Composite orders, highly adorned with sculpture.

The Palais Royal, which stands to the N. of the mass of buildings just noticed, has towards the Rue St. Honoré a front with two wings, united by

Digitized by Google

a screen which encloses a courtyard somewhat resembling the Horse Guards or Admiralty of London, not inelegant, though of a very faulty style. Round the oblong space, at the back of the palace, the Duke of Orleans, father of king Louis Philippe, erected large houses and handsome colonnades, occupied by jewellers, tailors, marchands-de-mode, shoemakers, printsellers, restaurants, and keepers of cafés, estaminets, or smoking-rooms. The gardens are tastefully laid out, the whole being brilliantly illuminated with gas. Hence the Palais Royal is the perpetual rendezvous of the idle and curious, as well as of the little rentiers of the capital. The Palais du Luxembourg, where, during the Republic, the Directory held its sittings, and which, on the re-establishment of the monarchy, was used by the Chamber of Peers, and, after the revolution of 1848, by the 'Parliament of Workmen,' under the presidency of M. Louis Blanc, is a stately edifice, facing the Rue du Vaugirard, with two wings, connected by a screen and gateway; being remarkable for strength and solidity, as well as for the beauty of its proportions. The interior comprises several handsome apartments, the most interesting being the Salles des Séances, a semicircular chamber of no great size, round which were formerly arranged chairs for peers or *ouvriers*, while the flat side was occupied by the president's seat and tables for clerks. The gallery of the Luxembourg, which once boasted of a fine collection of old pictures, since removed to the Louvre, is now appropriated to the reception of works by living French artists. The gardens behind the palace, laid out in the old French style, have a sheet of water in the centre.

Among the buildings devoted to the use of the government and legislature, the first place is due to the Palais Bourbon, now the Palace of the Legislative Assembly. It was erected chiefly by the Prince of Condé, between 1722 and 1789, and it was occupied during the first revolution by the Council of Five Hundred. At the restoration of the Bourbons it was restored to the Condé family, with a proviso for the accommodation of the deputies in that portion of the building previously occupied by the council; but the entire palace was subsequently purchased for the use of the legislature. The Corinthian portico fronting the Pont Louis XVI., the pediment of which has been completed and exposed to public view, is of fine proportions; but, when compared with the building to which it is the entrance, it seems much too large, and leads to no apartments of any great size, except the Chamber of Deputies, a semicircular room ornamented with 20 Ionic columns of white marble, having gilt capitals. The president's chair and the tribune form the centre of the axis of the semicircle, round which rise successively the seats and desks of the deputies to the height of the basement supporting the columns. The walls are adorned with pictures and statues; and a spacious double gallery, capable of accommodating 700 persons, runs round the semicircular part of the chamber, fitted up with tribunes for high functionaries, the corps diplomatique, and seats for the public. The library of the legislature, a long and handsome gallery, contains about 60,000 vols., chiefly reports and law books, both French and English, including also a few rare MSS.

At the corner of the Rue du Faubourg St. Honoré is the Palais de l'Elysée National, for some time occupied by the emperor Napoleon III., while president of the republic. This palace has been the residence of a great variety of persons. It was built, in 1718, by Molet, for the Count d'Evreux. It was afterwards bought and occupied by Madame de Pompadour. At a later period it became the property and residence of Murat; and on his departure for Naples it was occasionally occupied by Napoleon I., who was much attached to it. Subsequently it was inhabited by the Duke de Berry. It contains some magnificent apartments. In one of these the emperor Napoleon I. signed his last abdication.

Some of the government offices are extremely handsome edifices, especially the Hôtel des Finances, an insulated structure of vast size in the Rue Rivoli; and the Hôtel du Quai d'Orsay, a noble stone building, on the plan of the Farnese Palace at Rome, and one of the most magnificent in Paris, comprising about 800 rooms, divided into offices for the Council of State, the Cour des Comptes, and for the departments of the Interior and Public Instruction. The Hôtel des Affaires Etrangères, in the Rue des Capucines, is a building of considerable extent, but with few pretensions to architectural elegance. The Hôtel des Monnaies, or Mint, S. of the Seine, a little W. of the Pont Neuf, built in 1771, has two fronts, the principal of which facing the river, has a length of 300, with a height of 78 ft. All the operations of coining are carried on within this building; and it is the place of assay for all gold and silver articles made in Paris. In one of the apartments is a superb collection of medals and casts belonging to all eras of French history. Among other buildings nearly or more remotely connected with the government of Paris are the following: 1. The Hôtel de Ville, in the Place of the same name, commenced in 1549, but not completed till 1605, having a broad front, with two side pavilions, higher than the rest of the edifice, and two gates, leading to a quadrangle, in which is a bronze statue of Louis XIV. It comprises some fine apartments, particularly the Grand Salle, at one of the windows of which Lafayette, in 1830, introduced Louis Philippe to the populace as the best of republicans. 2. The Palais de Justice, in the Isle du Palais, an edifice in a mixed style, erected between the 14th and 18th centuries, on the site of a still more ancient structure: in the interior a central staircase leads to a grand saloon, called the Halle des Pas Perdus, which comprises apartments for the Court of Cassation, the Cour Royale, and Cour d'Assize. 3. The Hôtel de la Legion d'Honneur, on the Quai d'Orsay.

Paris has a great number of prisons. The model prison, or Nouvelle Force, Rue de Mazas, is on a large scale, and is fitted up so as to carry out the solitary system to its farthest extent. It has 1,260 cells: and its arrangements, in regard to the security, the isolation, and the *surveillance* of the prisoners, are said to be as perfect as can well be desired. Of the other prisons those of St. Pelagie and St. Lazare are the most extensive and best managed. The prison for juvenile offenders, in the Rue de la Roquette, is built on the panopticon principle. The Abbaye, so infamous in the annals of the revolution of 1789, is now exclusively employed for the detention of military offenders.

Religious Edifices. — The sacred buildings of Paris, like those devoted to secular purposes, exhibit a great variety of styles; but, from the close of the 16th century downwards, the Grecian has prevailed. The first place, however, both as respects antiquity and grandeur, must be given to the Cathédrale de Notre Dame, erected between 1010 and 1407: it is a cruciform structure, with an octagonal E. end, and double aisles surrounding the choir and nave; a third aisle also being occupied by a series of seven external chapels. At the W. end are two lofty towers, evidently

Digitized by Google

intended to have been the bases for steeples; but the tower usually seen at the intersection of the nave and transepts was destroyed during the Revolution. The length of the church externally is 442 ft., the breadth 162 ft., and the length of transepts 352 ft.: the towers are 235 feet high. The exterior, though not without beauty, is heavy, owing to the absence of steeples and pinnacles, which give a light appearance to the majority of Gothic buildings. The W. front, however, with its three large gates and circular window, and the noble gateway on the W. side of the church, are highly worthy of admiration. The inside of the church has a very splendid and imposing appearance, owing to its numerous aisles and chapels; but the uniformity of effect has been entirely destroyed by the embellishments of the choir, which, though in themselves beautiful, are wholly unsuited to the rest of the building. The church of St. Germain des Prés, built about 50 years after Notre Dame, is cruciform, with a circular E. end. A considerable portion of the old building has gone to decay; and, out of three towers, only one remains; but the interior contains some good modern decorations, valuable pictures, and old monuments. There are 6 other churches, either wholly or in part of Gothic architecture; the most interesting of which is the church of St. Germain l'Auxerrois not only from its structure, but from the fact that the signal was given from its belfry, on the 23rd August, 1572, for the detestable massacre of St. Barthélemi. Among the more modern churches in the Grecian style, the largest and most splendid is that of St. Geneviève, now called the Panthéon in the quarter of the university. It was commenced in 1764 by Louis XV. The portico is composed of 22 fluted Corinthian columns, 60 ft. in height, supporting a triangular pediment 120 ft. broad by 24 ft. in height, in which is a sculptured composition, by David, representing the Genius of France (a colossal figure 14 ft. high), surrounded by the great men of the nation: on the frieze beneath is inscribed in gold letters—

'AUX GRANDS HOMMES, LA PATRIE RECONNOISSANTE.'

The plan of the church is a Greek or equilateral cross, the exterior having no windows, and being ornamented only by a frieze and cornice. In the interior a gallery and colonnade line the nave and transepts on both sides, forming so many smaller naves and aisles. Semicircular windows rise above the colonnades, throwing a strong light into all parts of the building, and from the centre of the cross rises a dome 282 feet in height, the lower part of which is encircled by a Corinthian peristyle of 32 columns, each 36 feet high. The inside is empty, without any embellishments, except its architectural decorations, but enriched with statues of Voltaire, Rousseau, Lagrange, and other illustrious individuals, whose remains have been deposited in the spacious vaults beneath the pavement. The total length of the Pantheon, including the portico, is 352 feet; interior length from E. to W. 295 feet; length of transept 265 ft.; uniform breadth 104 ft. On the whole, this church is a work of great merit: the general proportions are good, and there is much grace and elegance in the outline, as well as grandeur and simplicity in the design. Among the other churches, the most deservedly celebrated is the Madeleine, at the N. end of the Rue Royale, on the model of the Parthenon of Athens, but larger, being 328 ft. in length and 138 in breadth, while its archetype is only 228 by 100 ft. It is altogether a very noble structure, and is remarkable for purity and elegance of design. The church of St. Vincent de Paul, opened in 1844, is one of the finest in Paris. It is a parallelogram 243 ft. by 108 ft. It has a fine portico, and two lofty square towers. Paris has, in all, 20 parish churches, corresponding with the arrondissements, and about 50 district churches, besides others unattached, and several belonging to hospitals and convents. But none of these, except that attached to the Hôpital des Invalides (for which see *Hospitals*), requires any particular description. There are also several places of worship for dissenters from the Roman Catholic religion, comprising French Lutherans, Calvinists, and Independents; besides which there are English churches and chapels, American chapels, Jews' synagogues, and a Greek church; but none of them have any claims to architectural beauty, except the church of the Visitation, in the Rue St. Antoine, and the Gothic church belonging to the British embassy, in the Rue d'Aguesseau. The Roman Catholic clergy of Paris comprise an archbishop, 12 vicars-general, 3 metropolitan and 4 diocesan officials, 16 canons of Notre Dome, 34 honorary canons, with curés and vicars to the different churches. The Protestant clergy comprise Lutheran and Calvinist pastors, French independent ministers, with sundry English episcopal clergymen, and several ministers of other denominations. Paris still comprises several convents for females, but those of the present day bear but a very slight resemblance to the old nunneries, and are now little more than religious boarding schools for young ladies, or lodging-houses for the numerous sœurs de charité, who devote themselves to the nursing of the sick in the hospitals. There are, also, numerous societies, some of which are liberally supported, for the promotion of religion at home and abroad, as well as of religious education.

Judging from the statements of the most intelligent travellers, it would seem, whatever may be the other wants of the French capital, that an increase of church accommodation is not one of them. 'Had I not looked into the almanack,' says Mr. Maclaren, an English traveller (Notes, p. 17), 'I should never have found out which day was Sunday. The churches are open every day, and of course afford no criterion. The shops are open too; carts and carriages are plying on the streets, and placards invite you to vaudevilles at the theatres and ballets at the opera. Your first impression is, that Sunday has been blotted out of the French calendar. On closer inspection, you discover there is a difference between this day and the other days in the week, though I am sorry to say it is a small one. In making a circuit about 12 o'clock through the Palais Royal, the Rue Vivienne, Boulevard des Italiens, Rue de la Paix, and Rue Rivoli, I found about 1 shop in 20 shut or half shut. At 4 o'clock, on a shorter tour, I found about half of them shut, and at 6 o'clock, three-fourths. The thoroughfare of carriages is perhaps also rather less, and that of loaded carts decidedly so. Some of the working classes, I understand, rest on Sunday, going to church perhaps in the morning, and in the evening to a theatre with their wives, or to a cheap café, and playing at dominos. On Sunday-week I went to the once celebrated Café de Mille Colonnes, (now sunk to the character of an estaminet, or smoking-house,) to get a cup of coffee. It was about seven, I found two or three parties playing at billiards, and a score of little groups, of two, or three, or six individuals, busy with dominos. Two of the parties near me consisted each of a man, with his wife and daughter. The greater proportion, however, of the working classes ply their labours on Sunday till dinner-time, then rest in the afternoon, and that they

Digitized by Google

may not want their holiday, go beyond the barriers, where wine is cheap, and spend the money in drinking and dancing. The over-rigid observance of the Sunday in Scotland, which sometimes disgusts young minds with religion altogether, is a light evil when compared with this.'

Cemeteries. — The Parisians formerly interred their dead, like the ancient Romans, along the sides of the roads leading out of the city; but, as the pop. increased, and its boundaries were extended, these grave-yards became included within its precincts, and were at length almost in the centre of the town. They were, however, both few and small, so that the inhabs. were compelled to have recourse to other modes of interment, and, accordingly, large trenches (similar to those opened during the prevalence of the plague in London) were dug for the reception of corpses thrown in till the holes were filled, when they were covered over, and others opened close to them. This disgusting method of burying necessarily rendered the neighbourhood of these cemeteries extremely unhealthy, and at length government interfered to prohibit all funerals within the town, and ordered the formation of spacious cemeteries at a mile distance from the city walls, at the same time directing that the bones in the old grave-yards should be deposited in the subterranean quarries or catacombs, under the Quartier St. Germain. Paris has now six large and well laid-out cemeteries, similar in many respects to those which have since been formed on the same model near London, Liverpool, Leeds, and other large towns of England. The Père-la-Chaise, outside the E. barrier, is the finest of the Parisian cemeteries, and its advantageous situation on the slope of a hill, the number, as well as beauty, of its monuments, and the celebrity of many of those whose remains have been brought thither, make it one of the most interesting places in the French metropolis. The catacombs are very extensive, running under about one-third part of Paris S. of the Seine: they are arranged into galleries lined with piles of bones, and the entrance is near the Barrière de l'Enfer, but, being deemed unsafe, they are seldom shown to visitors.

Hospitals and Benevolent Institutions. — Hospitals for the relief of the sick, and hospices for the aged, infirm, & foundlings, existed in Paris from a very early period; but being exclusively under the direction of ecclesiastics, the objects of the founders were often grossly perverted, and the revenues of these establishments applied to improper uses.' No improvement took place till the Revolution, when, by a decree of convention in 1793, the two old and only remaining hospitals were ordered to surrender a portion of the inmates of their crowded and unhealthy wards to the convents and other houses that had become national property. An administration, consisting of a general council and administrative committee, was formed in 1801, for the purpose of improving the condition of the public charities of Paris: a tax of 8 per cent. on the sums received at theatres and other places of public amusement; a tax on cemeteries; a portion of the octrois of the city of Paris, with dues from the Monte-de-Piété being, at the same time, effected for their support. These institutions have since increased in number and magnitude with the increasing population of the city, and, in 1849, some further measures were taken with the view of rendering their administration more efficient.

Of the hospitals, the Hôtel Dieu is entitled to the first notice, on account of its antiquity; for it is known to have existed in the middle of the 12th century, and, even at that early period, to have had some valuable endowments. It was enlarged between the reigns of Henry IV. and Louis XVI.; and, since the Revolution, the buildings have been so much improved that at present the Hôtel Dieu, with its subordinate establishment in the Rue de Faubourg St. Antoine, has 850 beds: the average annual number of patients is 12,000; the mortality 1 in 8. It is in every respect extremely well appointed, and has among its medical officers the most celebrated physicians and surgeons of Paris, so that the Hôtel Dieu may be considered as the great normal hospital of France. The hospitals next in importance are those of La Pitié, La Charité, St. Antoine, Beaujon, des Enfans Malades, and des Vénériens; the whole number of these establishments under the civil administration amounting to 16, exclusive of 3 military hospitals, regulated by the minister of war. These hospitals, however, are, with two or three exceptions, situated in close neighbourhoods, and from the antiquity of the buildings, ill-planned; but the interior management is extremely good, and may bear a comparison with that of the first London hospitals. Among the hospices, the principal are the Bicêtre, for infirm old men, the Salpétrière, for aged women, two hospices des Incurables, and 1 for orphans and foundlings. There are also numerous maisons de santé in and about Paris, which receive patients at certain fixed scales of payment, and may therefore be called hospitals for the middle classes. A great number of minor institutions for the relief of the sick and poor are supported by private subscription.

Crèches, or public nurseries, have been established in different parts of Paris. In these, the infants of poor women engaged in factories or other out-of-doors labour, are received and attended to. The women deposit their infants in the crèche, in the morning when they go to their work, return to suckle them at certain hours, and carry them home in the evening. The crèches are sometimes wholly supported by public subscriptions; but occasionally those who carry their children to them contribute small sums to their support.

Of all the establishments in the French capital devoted to the support of the aged and infirm, the most important, both on account of the grandeur of its buildings and the benefits which it confers on its inmates, is the Hôtel des Invalides, intended for the support of disabled officers and soldiers, or those who have been in active service upwards of 30 years. The edifice, situated at the S. end of an avenue leading over the Pont des Invalides from the Champs Elysées, and begun in 1675, is a conspicuous object from a distance on account of its gilded dome, lantern, and spire rising to a height of 323 ft. above the floor. It is composed of 5 courts of equal form and size, surrounded by buildings 5 stories in height, and covers a space of nearly 7 acres; and is, on the whole, a very heavy building, without any exterior beauty. The church of the establishment is indebted for its noble appearance principally to its magnificent dome supported by 20 pairs of Composite pillars. Besides about 170 pensioned officers, there are about 3,000 sub-officers and privates, who are boarded, lodged, and clothed, and receive a monthly stipend varying according to rank. The dormitories contain each from 50 to 60 beds; besides which there are large infirmaries for the sick. All, except field-officers, mess at public tables, and all wear the same uniform. Their only duty is to mount guard within the precincts of the hotel; and, when the sovereign comes within its walls, they have the exclusive privilege of guarding his person. On the whole, the Hôtel des Invalides, though by no

Digitized by Google

means so fine a building as Greenwich Hospital, near London, is entitled to rank with it as one of the grandest national institutions of Europe. The Hôtel des Invalides contains the remains and the magnificent mausoleum of Napoleon I.

Commercial Establishments. — Paris, till 1826, though abounding with fine public edifices, had no structure specially devoted to the transacting of commercial business. The merchants previously met in the Hôtel Mazarin, and afterwards in the Palais Royal; but the inconvenience to which they were subject led, in 1808, to the formation of a plan for constructing an exchange sufficiently large for the multifarious business of so great a capital. The form of the Bourse, which stands in a spacious square at the E. end of the Rue St. Augustin, is a parallelogram, 212 ft. in length by 126 ft. in width, surrounded by a peristyle of 66 Corinthian columns. The Salle de la Bourse, or great hall, on the ground-floor of the building, 116 ft. in length by 76 ft. in breadth, is surrounded by arcades of Doric architecture. A grand staircase leads to a spacious gallery supported by Doric columns, and to the hall of the Tribunal of Commerce. Corridors run round both the upper and lower hall, communicating with various rooms devoted to commercial purposes; and on the whole the arrangements are of the most complete description. The hours for transacting business are from 1 to 5, but the galleries and corridors are open from 9 to 5. The Banque de France, erected by Mansard in 1720, possesses little architectural beauty. The present establishment was founded in 1803, and received the exclusive privilege of issuing notes payable to bearer. Its capital consists of 91,250,000 francs in shares of 1,000 francs each. The notes issued are for 500 and 100 francs. The customary rate of discount varies according to circumstances, but averages 4 per cent.; the bank, however, discounts no bills that have more than three months to run. It opens, also, comptes courants with all requiring them, and charges no commission, its only remuneration for such transactions arising out of the use of money placed in its hands. The government of the bank is vested in a council of 20, elected by the 200 largest proprietors; the governor and deputy-governor are appointed by the president. The institution is flourishing, and enjoys almost unlimited credit.

Markets.—The public establishments connected with wholesale trade are called halles, the principal of which is the Halle au Blé, or corn-market, a circular building completed in 1767. The Halle aux Vins, on the Quai St. Bernard, S. of the Seine, near the Jardin National, is an immense inclosure, having an area of 31,100 sq. yards, walled on three sides, and fenced towards the quay by an iron railing about 850 yards in length. This great market is divided into streets called after the principal French wines; there are seven large piles of buildings, four in front and three behind, one of which is fire-proof, and used solely as a store-house for spirits. The warehouses and vaults will contain 400,000 casks. Wines entering this depôt are not charged with the octroi till taken out for consumption; but they pay one franc per cask for warehouse room. The hall is open from 6 to 6 in summer, and from 7 to 5 in winter; and the counting-houses of some of the principal wine merchants are within the premises. The other wholesale markets are the Halle aux Draps and the Halle aux Cuirs; the Halle aux Veaux, near the Quai de la Tournelle, being now exclusively used by the chiffonniers for the sale and exchange of rags.

Distinct from the halles, or wholesale markets, are the *marchés*, or ordinary markets, although the distinction is not always drawn, some of the largest retail markets being also called halles. The greatest of these, and, in fact, the central market of Paris, is the vast structure going by the name of the Halles Centrales, composed of twelve pavilions, and divided into two equal portions by a boulevard 32 metres in width. This immense market was commenced in 1851, but was only partly finished in the summer of 1866. Besides these Halles Centrales, Paris has above 30 markets, the principal of which is that of St. Germain, opening on the Rue de Seine, and constructed from the designs of Blondel. It is a parallelogram, 500 ft. in length by 480 ft. in breadth. One of the most celebrated of the former markets is the Marché des Innocens, in the centre of which, as already observed, is one of the noblest fountains in the capital. The other markets are, generally speaking, commodious, but they require no particular description. Paris has, also, five abattoirs (built in consequence of a decree of Napoleon I., 9th Feb. 1810), where the animals necessary for the consumption of its inhabs. are killed. The abattoir of Montmartre is about 1,074 ft. long and 384 ft. broad, and that of Ménilmontant is nearly as large; the other three (two of which are S. of the Seine) are inferior both in size and arrangement.

Internal Consumption.—All estimates respecting the consumption of provisions in a populous city must, under ordinary circumstances, be extremely vague; but with regard to Paris there is less uncertainty, owing to the octrois, or duties, levied on most articles coming across the barriers. The following, according to official statistics, were the articles of food consumed in Paris in the year 1863:—wine, spirits, and fermented liquors, in cask and bottle, 3,434,000 hectolitres; beef, mutton, veal, pork, venison, potted meats, 123,643,359 kilogrammes; cheese, 2,968,967 kilogrammes; sea fish to the value of 11,880,672 fr.; oysters, 2,652,832 fr.; fresh-water fish, 1,480,390 fr.; poultry and game, 12,928,753 fr. It is very difficult to form any estimate of the consumption of bread, on account of the permitted exportation of wheat into the neighbouring districts, whenever the price outside the barriers exceeds that of the Halle au Blé, but the daily consumption of flour is supposed to amount to about 2,000 sacks. Cattle, sheep, &c. chiefly come from Normandy, the Isle of France, and Limousin.

Among other articles of consumption, the tobacco sold in Paris amounts to about 800,000 kilog. Fuel, which is here one of the most costly articles of domestic expenditure, consists principally of wood; but considerable quantities of coal and charcoal are also made use of.

Industry, Commerce, and Trade.—Paris, besides being the political cap. of France, is one of the chief seats of the national industry and commerce. Many branches of industry are conducted on an extensive scale; the advantages resulting from the greater subdivision of employment, the greater command of scientific assistance and of skilled workmen, being more than sufficient to countervail the higher wages and heavier expenses in other respects attending their prosecution in so great a city. Still, however, it is impossible that a city like Paris, without coal, and without the command of water power, should ever be able to come into successful competition with such places as Manchester, Glasgow, or Birmingham. The articles produced in Paris are, in fact, chiefly those of virtù, jewellery, the fine arts, or those immediately ministering to the luxurious wants of a great capital. In all these a great increase has taken place within the last 20 years. Two large manu-

Digitized by Google

facturing estabs. belong to the government, and, like all similar establishments, are carried on at a loss. One of these, the Manufacture Nationale des Gobelins, so called from the place where it is carried on, having originally belonged to a family of the name of Gobelin, who amassed great wealth as dyers; but the property having changed hands, it was converted into an establishment for weaving tapestry; and, becoming celebrated for the beauty of its products, was purchased by Colbert for Louis XIV. in 1662, since which it has belonged to government. The pieces of tapestry are most exquisitely executed, and the effect of some of them is scarcely inferior to that of the best oil paintings. The manufacture of a single piece frequently occupies three or four years, costing from 15,000 to 18,000 francs. Some splendid carpets are likewise manufactured in this establishment. Its products are chiefly destined for the palaces and public buildings, or for presents to monarchs and distinguished personages: a few of the inferior pieces of tapestry are allowed to be sold, but the sale of carpets is forbidden. A drawing school is attached to the manufactory, and lectures are annually delivered by the most celebrated chemists on the chemical principles of dyeing. The national manufactory of tobacco is conducted on a very extensive scale, in a handsome modern structure on the Quai des Invalides. About a fifth part of the entire produce of tobacco in France is manufactured in this establishment. The manufacture of Sèvres porcelain, though about 6 m. from Paris, and not in the department of the Seine, may be noticed in this place: it has been the property of the state since 1759. Some of the articles furnished by this manufactory bring very high prices, and are esteemed alike for elegance of form and the beauty and brilliancy of the paintings. An exhibition takes place in September, when there is an extensive show of foreign china and earthenware, as well as of specimens in different stages of progress. The sale-dépôt, in Paris, is in the Rue Rivoli. Among the other manufactures of the cap., jewellery, works in gold, silver, bronze, and steel, watchmaking, the manufacture of chemical products, hats, carpets, artificial flowers, and the compounding of all kinds of bonbons and sweetmeats, furnish employment to a vast number of persons; besides which, Paris has woollen factories, establishments for weaving silk shawls, and above 20 factories for cotton or mixed goods of cotton and worsted. The manufacture of both silk and cotton stockings is conducted on an extensive scale.

The Chamber of Commerce made a detailed census of the industrial population in the years 1860–63, from which it appears that the French metropolis contains not less than 101,000 manufacturing, or industrial establishments, employing 416,000 workmen. The classification of these establishments shows that no fewer than 29,069 are devoted to feeding Paris; 5,378 to building Paris; 23,800 to clothing Paris; and 7,391 to furnishing Paris. Printing and engraving occupy 2,759 establishments; gold and jewellery, 3,199. The number of workmen employed shows that in Paris the great principle of industry, co-operation, is imperfectly understood. There are very few large establishments. Each of the 101,000 firms employs an average of 5 workmen. Only 7,492 employ more than 10 hands; 31,480 employ from 2 to 10; and 62,199 employ but a single hand, or none out of the family. The 416,000 workpeople are divided into 286,000 men, 105,000 women, and 25,000 children. Of these 87 in every 100 can read and write; 12 in every 100 can neither read nor write; and those who can only read count as 1 in 100. If the proportion of those who can read and write is large, there is nevertheless the grave fact that 50,000 workmen are incapable of signing their names. The day's work is less than 12 hours in 7,000 establishments; in 37,000 more than 12 hours; and in 20,000 there is no fixed limit. The wages average 4f. 51c. per day. This was, however, in 1861, when the census was made; it is probable that in 1866 the great development of industry must have raised the average to 5f. a day. In examining the question of wages it was natural to make inquiries as to the periods of 'slack work' and of absolute cessation. The result proved that out of the 101,000 establishments 64,000 continued without interruption throughout the year. The remaining 36,000 suffered more or less from slack work and no work at all. In some of these the slack season endures from two to four months; but, as these periods are regular in their recurrence, both master and man can provide against them.

The retail trade of Paris is on a very extensive scale, and it is estimated that there are 9,000 retailers of food and drink, that 7,000 are employed in making and selling articles of dress or ornaments, and about 1,000 in keeping hotels, restaurants, and cafés.

Bridges, Quays, and Navigation.—Paris has not, like London, a deep and broad river, navigable to the city by sea-borne vessels of large burden; but the Seine is, notwithstanding, a striking feature in Paris on account of its bridges and quays, as well as advantageous from its extensive boat-navigation. It enters Paris from the ESE., about 3 m. below its junction with the Marne, at Charenton, and in its course forms a slight curve northward, its whole length from the E. to the W. extremity being nearly 7 m., in which space it forms 3 islets, the smallest, but highest up the stream being the Isle Louvier, used as a depôt for wood-fuel, the Isle of St. Louis, about 700 yards in length, and the Isle du Palais, the site of the ancient *Lutetia*, about 5 furlongs in length by 2 do. in breadth. The river is crossed by more than 30 bridges, of which some are on the suspension plan, some of iron and stone, one of wood, and the rest of stone. The most notable of these bridges are the Pont d'Austerlitz, an iron bridge; the Pont Neuf, which crosses 2 branches of the Seine, and has 12 arches; the Pont des Arts, a light construction of iron; the Pont Imperial, a well constructed stone bridge of 5 arches; the Pont de la Concorde, a stone structure of 5 flat arches; and the Pont de Jena, constructed of flattened elliptical arches and apparent lightness. The islets in the river are connected with the N. and S. banks by a dozen bridges, some of stone and others of wood, of inferior size and little beauty. The banks of the Seine are not blocked up, like those of the Thames, with coal-wharfs, warehouses, and irregularly built houses, running close down to the water's edge, but have fine open quays, affording uninterrupted walks, extending on both sides the river from one end of the city to the other. Wharfs and landing places are formed in different parts, particularly towards the E. end of the city. Depôts for firewood are to be found along the river, and on all the outskirts of the town, and the boats along the wharves on both sides the Isle du Palais furnish supplies of wood and charcoal. The navigation of the river is effected by large boats called coches d'eau, by barks, and by steamers, the number of which is progressively increasing. From the higher parts of the river about 11,000 boats arrive every year with fruit, corn and flour, hay, wine, paving-stones, and bricks, besides about 4,000 barks laden with timber, charcoal, and fire-wood.

Digitized by Google

Barges of from 40 to 60 tons burden come from Rouen with colonial produce, cotton goods, cider, salt, and foreign corn, and steamboats ply daily between Rouen and Paris, and others during summer between Paris and Montereau.

Canals, Railways, and Omnibuses.—The canals N. of the Seine consist of 2 or 3 branches connected with an undertaking for uniting the waters of the Seine and Ourcq, with the view not only of making an inland navigation, but also of supplying the capital with water of better quality than that of the Seine. The Canal de l'Ourcq receives the waters of the Ourcq about 28 m. NE. Paris, and after collecting several minor streams falls into a basin in the NE. suburb of the city, from which branch several canals almost encircle the N. side of Paris. These canals, however, are less used for navigation than for supplying the city with water.

Paris is the centre of all French railways. There are 8 great lines of railway terminating in the city, and the Chemin de fer de ceinture, or girdle-railway, connects the whole of the northern and western suburbs, as well as the chief lines with each other. The finest station is that of the Chemin de fer du Nord, a palatial building, the façade of which is ornamented by a profusion of statuary. The Chemin de fer de l'Ouest has two stations, north and south of the river: this system includes the two lines to Versailles, which at times, when the great fountains are playing—always on Sundays—carry nearly 100,000 travellers away from and back to Paris.

All the omnibuses of Paris belong to one great company. In the year 1854, the number of omnibuses in Paris was 329, carrying 34,000,000 of passengers annually. In 1864 the company employed in the 20 arrondissements 562 vehicles, each of which conveyed in every journey an average of 29 persons, or 453 a day, which made for the 562 carriages 254,586 daily, and 92,923,890 per annum: out of whom 53,814,768 rode inside, and 39,109,122 outside. This was an increase of nearly 4,000,000 on the figures of 1863. In addition to the 562 vehicles of Paris, there were 48 in the environs, and including the omnibuses called the American, from the Place de la Concorde, the number of passengers was 99,228,313 annually, or 271,858 daily. Each of the Paris omnibuses traversed, in 1864, an average distance of 97 kilometres (60 miles) a day. The vehicles of the environs ran 79 kilometres a day. The number of horses employed was 7,261 daily, of which 6,831 were for Paris, and 430 for the neighbourhood.

Establishments for Education.—The university of Paris, which appears to have been established early in the 13th century, though some writers have traced its antiquity up to the time of Charlemagne, comprised, before the revolution of 1789, 10 great and 26 minor colleges, which had each faculties of divinity, law, physic, and arts. The professors appear to have been attached to colleges rather than to the university as an abstract body, and the number of students living in the colleges was very considerable. The revenue of the university arose out of a 28th part of the rent paid by the farmer-general of the royal posts and messageries, which, with the students' fees, made a large income; and the extensive buildings, still remaining, testify the importance once attached to these institutions, at the same time that the literary annals of France prove that, speaking generally, the various functionaries performed their duties pretty efficiently. At the Revolution, however, the colleges were abolished, their estates confiscated, and the whole establishment was remodelled. Further alterations were made by Napoleon I., but the present system dates from the restoration of the Bourbons.

The University of Paris, as now constituted, is the central establishment for education in France, and has under its direction all the faculties, colleges, and schools of the country: it may be considered a government establishment, since the minister of public instruction is *ex-officio* rector. The university has jurisdiction over the five national and two private colleges of Paris, the college of Versailles, and other institutions and pensions within certain limits. There are four faculties for higher degrees, granted by the academic council; but no students can be admitted to them without having previously taken the degree of bachelor of letters. Professors are attached to each faculty, and deliver gratuitous courses of lectures, a certain attendance on which, as well as other exercises, is necessary for obtaining degrees. Candidates for the degree of bachelor of letters must produce certificates of having studied at least one year in one of the colleges of the university, in some authorised institution, or under the charge of a regular tutor. Examinations are publicly held four times a year under four professors appointed by the academic council: they include numerous oral questions on philosophy, literature, history, and the elements of mathematics, with papers for written composition, and the translation of Greek and Latin authors. The examination of each candidate must last 1½ hour, but may be protracted at the pleasure of the professors. All the higher degrees are granted only after severe trials, and numerous candidates are annually rejected. At the end of each academical year, in August, a grand distribution of prizes takes place in the public hall of the Sorbonne to the most deserving pupils of these colleges, and the degree of emulation thus excited among more than 5,000 students is immense. The minister of public instruction presides at this ceremony, the professors deliver Latin orations, and the company comprises the most distinguished functionaries and literati of France.

Paris, besides its colleges, has numerous institutions and pensions for boys, with corresponding institutions and pensions for girls. These are similar in all respects, except in size; the institutions being on a larger scale, and the course of study more general and more advanced in them than in the pensions. The conductors of these establishments must be at least graduates of letters, and are bound by law not only to follow the course of study prescribed by the university, but to send their pupils daily to one of the royal colleges in order to attend the professors' lectures. It is their duty, also, to assist them in their studies, and prepare them for the lessons to be gone through in the public class-rooms of the colleges. All the permanent students of the colleges wear a military-looking uniform, and are summoned to their duties by beat of drum. There are no colleges for girls, and their education varies according to the system followed in each particular establishment: the mistresses, however, of the different schools are obliged to pass an examination before persons authorised by the university.

Among the other establishments for education, the highest is the College of France, founded by Francis I. in 1530, and augmented at different periods. It consists of professors only, called *lecteurs*, among which are some of the ablest men in Paris. Their lectures are gratuitous, and open to everybody. The museum of natural history, in the Jardin des Plantes, has likewise an attached corps of 13 professors, who deliver courses of lectures on different departments of natural history, chemistry, and agriculture. These lectures

Digitized by Google

are, also, perfectly open and gratuitous; as are those delivered on Oriental literature at the Bibliothèque Nationale; on painting, and sculpture, at the National school of fine arts; and on various branches of practical science at the Conservatoire des Arts et des Métiers. One of the best of the educational institutions to which the Revolution gave rise is the Ecole Polytechnique, established in 1794–95, for the promotion of mathematical and physical science and the graphic arts, and the preparation of pupils for the artillery, engineering, and mining departments. The school is under the control of the minister of war; but the details of management and instruction are left to a general council, and it underwent sundry modifications in 1848. The most distinguished masters in every branch of science are appointed by government; and no students are admitted without having previously undergone an examination, to prove their competency in the classics and elementary mathematics. The pupils, of whom there are about 300, study two, sometimes three years; and no one can enter the higher departments of the military service without a certificate of attendance at this establishment. There are 24 scholarships, 12 of which are in the gift of the minister of war, 8 of the minister of the interior, and 4 of the minister of marine. The establishment is supported by government; but the pupils pay an annual sum for board and lodging. The mathematical education at this institution is excellent, much superior, indeed, to what it is in most other institutions of the same kind. Another seminary of importance, and closely connected with Paris, though not within the cap., is the Maison Royale of St. Denis, established by Napoleon I., and furnishing an excellent education to between 600 and 700 young ladies, the daughters, sisters, and nieces of members of the legion of honour, of whom 400 receive their instruction gratuitously. This institution is admirably conducted, and is a model for a large college of females; it has, also, two succursal houses, in which 400 pupils are gratuitously instructed. There are also several normal schools, for the purpose of forming teachers in the primary schools.

From statistical accounts published by the government, it appears that in 1864 there were in Paris 109 schools for boys, containing 28,000 pupils, of which 63 were kept by lay masters and 46 by members of the religious confraternities; 111 schools for girls, with about 27,000 pupils, of which 57 were managed by lay mistresses and 54 by sisters of the religious communities, who devote themselves to education; 84 infant schools, with 15,000 children; 62 classes of male adults; 18 of female adults; 49 ouvrières or workshops for the employment of poor females; and six special schools of design for men, and nine for females. In addition to these there were 44 new educational establishments authorised during the year 1864. Of these there were 11 for males, of which six were directed by laymen and five by confraternities; and nine for females, of which six by lay mistresses and three by the communities. These are maintained out of the annual funds allotted by the department of Public Instruction, amounting for 1864 to over 4,000,000f., including cost of instalment and repairs. In all there were over 60,000 boys and girls receiving primary instruction in 1864. One circumstance deserving of notice is the large number of schools in Paris directed by the religious confraternities. Besides these establishments supported by state funds, the city of Paris pays an annual sum for the maintenance of nine free schools for boys, seven of which are directed by the Christian brethren; and eight for girls, all directed by nuns; so that Paris, with its university and its normal primary schools, counts nearly as many congregationist as lay schools.

Literary Institutions.—Among the many chartered and private literary societies of Paris, the highest place is due to the Institute, the first establishment of the kind in Europe. A decree of the Convention, in 1793, annihilated the old académies, including, among others, the Académie des Inscriptions et des Belles Lettres, the most celebrated academical institution that ever existed. In 1795, however, the *Institut* was formed, with the view of combining the literary and scientific academies into one body. In 1803, Napoleon I. divided the Institute into four classes; and, in 1832, a fifth was formed of moral and political science. The titular members, of whom there are 217, receive pensions from government, ranging between 1,200 and 1,500 fr. a year, besides whom there are 45 free academicians, 31 associates, and 219 corresponding members. The magnificent building in which this learned body meets is on the Quai Conti, near the Pont Neuf: it was built at the close of the 17th century, after the designs of Levau, at an expense of 2,000,000 fr., left by Cardinal Mazarin, who intended it should be a college for natives of 4 provinces then recently annexed to the crown of France. The principal room of the palace (formerly used as a church) is now appropriated to the sittings of the different classes, and fitted up with benches forming a semicircle facing the president's chair. The Mazarine library comprises 160,000 printed vols., with 4,500 MSS.; and the more recently formed library of the Institute has upwards of 100,000 vols., chiefly scientific works. At one end of this library is Pigalle's celebrated marble statue of Voltaire. The interior is adorned with busts and bass-reliefs. The Bureau des Longitudes is another important public body, formed in 1795, for the discovery of the best methods of ascertaining the longitude, and for the general improvement of navigation: its meetings are held at the Observatory (near the Barrière d'Arcueil), a building well suited for astronomical observations, and furnished with every description of philosophical instruments, and a good library of scientific works. The Bureau produces annually the celestial almanack, called the Connaissance des Temps, for the use of navigators; and another work of a more general character, the Annuaire du Bureau des Longitudes. The Royal Academy of Medicine, formed in 1776, and restored in 1820, is charged with making reports to government on all matters of public health: this establishment, as definitively organised in 1835, consists of 175 resident, and 25 country members, with 22 foreign associates. The following are among the principal learned societies of Paris supported by private subscription, those publishing memoirs and bulletins of their proceedings being distinguished by an asterisk:—

* Société Nationale des Antiquaires.	Société Entomologique de France.
„ Nationale d'Agriculture.	Société d'Hist. Naturelle.
* „ Géologique de France.	Athénée Nationale de Paris.
* „ de Géographie.	* Institut Historique.
„ Grammaticale.	Athénée des Arts.
* „ Philomathique.	Académie des Arts.
„ Philotechnique.	Académie de l'Industrie Française.
* „ de Statistique Univ.	* Société pour l'Encouragement de l'Industrie Nationale.
„ d'Horticulture.	
* „ Asiatique.	

Libraries, Museums, and Picture Galleries.—By far the most celebrated library of Paris, and one of the largest and most valuable in the world, is

Digitized by Google

the Bibliothèque Impériale. This vast collection of books is deposited in the old Hôtel de Nevers, a long, inelegant-looking edifice in the Rue Richelieu. It was begun in the middle of the 16th century, and at the death of Louis XIV. it had 70,000 vols.: it was afterwards greatly increased by the addition of MSS. and printed books from the suppressed convents; and it is said to comprise at present above 800,000 books and pamphlets, 80,000 MSS., 100,000 medals, 1,600,000 engravings, and 300,000 maps or plans. It is open from 10 till 3 daily (except Sundays, and during a recess of six weeks in September and October), and every facility is given for literary research, except that the books cannot be removed from the building. Among the libraries attached to public establishments, the following are the largest:—That of St. Geneviève, comprising 200,000 printed vols. and 30,000 MSS.; the two libraries of the Institute, consisting together of 260,000 vols. and 4,500 MSS.; that of the Arsenal, 200,000 vols. and 6,300 MSS.; that of the Legislature, 50,000 vols.; that of the Louvre, formerly the private library of Louis Philippe, containing 85,000 vols.; and that of the Bibliothèque de la Ville, 60,000 vols., all open to the public.

Paris has also several valuable museums, belonging either to the government or the university. The museum of natural history, in the Jardin des Plantes, may be said to stand at the head of every institution of the kind, not only in France but elsewhere: it is conducted at an annual expense of 300,000 fr., and gives employment to upwards of 160 persons. The Jardin des Plantes, exclusive of a large collection of exotic plants from all climates, comprises buildings fitted up as dens for carnivorous animals, with menageries for foreign birds and beasts, which are all provided with habitations suitable to their modes of life. This collection of living animals, perhaps the largest in Europe, has enriched the museum with many new species, and enabled zoologists to improve the study of comparative physiology. Large additions to the menagerie have recently been made, and the collection is constantly on the increase. The total expense of the establishment amounted to 582,380 frs. in the year 1864. The amphitheatre of anatomy and museum of natural history occupy a large space at the end of the garden: on the first floor of the latter is a superb collection of reptiles and birds; the second floor is devoted to the reception of mammalia, birds, insects, and mollusca, arranged according to the system of Cuvier (who here pursued those studies that have gained him an imperishable fame); and on the third story is arranged a general herbal, comprising upwards of 50,000 species, besides special collections amassed by Tournefort, Jussieu, Humboldt, and Decandolle, the entire number of specimens amounting to nearly 400,000. Along the E. side of the garden runs a long gallery, in which is deposited a noble museum of geology and mineralogy, only recently formed, and even now second to none in Europe. The museum of comparative anatomy is kept in a detached building W. of the garden; and the number of preparations, which fill 15 rooms, considerably exceeds 15,000. The menagerie is open every day, and the museums may be seen by tickets twice or three times a week. Paris has many minor collections of anatomy and mineralogy, attached to the school of medicine, and to its numerous literary societies; but none of them are sufficiently extensive to require description. The Conservatoire des Arts et des Métiers, in the Rue St. Martin, deserves notice, however, both on account of its great extent and the astonishing variety of instruments and machines, specimens of manufacture, and models of patents, deposited therein; in fact, this gallery of practical science is one of the most interesting exhibitions in Paris; and having been re-arranged and catalogued, may now be seen to great advantage. It is open during two days in the week; but the library is accessible seven or eight hours a day.

The great glory of Paris, as respects the fine arts, is the gallery of the Louvre, comprising a most extensive and valuable collection of pictures and statues. During the latter years of the reign of Napoleon I., this gallery was the richest and most magnificent by far of any that ever existed, having then to boast of the chefs-d'œuvre of Rome, Florence, and, in fact, of the greater part of continental Europe, carried off by the conquering legions of France. But victory having deserted the eagles of Napoleon, these treasures were again restored to their former possessors, and the Louvre has no longer to glory in the Apollo Belvidere, the Venus de Medici, and other matchless productions. Still, however, the collection is a very noble one. Eighteen large halls, on the ground-floor, are filled with pieces of sculpture, including the choicest treasures of the Villa Borghese, and many works that once embellished ancient Rome. Many of them are of great value; among them the 'Diane à la Biche,' standing on a pedestal adorned with most exquisite bas-reliefs; a statue of Mars, supposed to have been modelled from a picture by Zeuxis, once in the temple of Concord at Rome; the celebrated Fighting Gladiator, by Agasias of Ephesus; the Hermaphrodite of the Villa Borghese; a statue of Jason, erroneously called Cincinnatus; and the magnificent group of Silenus and the infant Bacchus discovered in the garden of Sallust at Pompeii. Five other rooms in the basement story are devoted to the reception of works by modern sculptors; a large apartment was filled in 1830 with a collection of Egyptian antiquities, and a large gallery has since been opened, called the Musée de la Marine comprising models and sections of vessels, plans of ports, and other naval curiosities. The picture gallery, which is on the first floor, is approached by a grand staircase painted by native artists, and comprises a suite of nine apartments, the walls of which are lined by upwards of 1,500 pictures by artists belonging to the French, Flemish and Dutch, Italian and Spanish schools. Among the pictures of the French school are 15 admirable landscapes by Claude, among them the well-known 'Disembarkation of Cleopatra;' 16 compositions, chiefly scriptural, by N. Poussin, among which may be distinguished an 'Assumption' and 'Holy Family;' and 17 beautifully coloured marine paintings by Vernet. Among the Flemish and Dutch pictures, which, like those of the French school, occupy three apartments, the most distinguished specimens are Gerard Dow's 'Dropsical Woman;' several pictures by the Vandycks, particularly a sketch of the 'Dead Saviour in the Virgin's arms;' 14 fine studies by Rembrandt, including his 'Venus and Cupid;' and 38 pictures by Rubens, the principal of which are, the 'Flight into Egypt,' and a composition known to connoisseurs as the 'Vierge aux Anges.' The schools of Italy and Spain occupy the three remaining apartments, which, indeed, contain the gems of the gallery. The following have been specified as those more particularly entitled to notice:—Raphael's 'Belle Jardinière,' and Holy Family, painted for Francis I., who paid for it upwards of 45,000 francs; Leonardo da Vinci's portrait of 'Monalisa;' Correggio's group of 'Jupiter and Antiope;' Domenichino's 'St. Cecilia;' Guido's 'Infant Saviour on the Virgin's knee;' Guercino's

Digitized by Google

'Repentance of St. Peter;' a magnificent battle-piece, and the 'Witch of Endor,' by Salvator Rosa, Murillo's 'Infant Jesus;' and Espagnoletto's 'Adoration of the Shepherds.'

Literature and Periodical Press.—Paris is the great centre from which emanate all the most important publications of France, and in which congregate all the most distinguished French writers. The increase of publications appears to have been regularly progressive from 1817. Within the last 20 years a vast number of important and valuable new works, especially in history, philosophy, and science, have issued from the French press, as well as many republications of old standard works. The largest of these undertakings are mostly conducted at the expense and risk, not of one, but of several publishers, on a joint stock principle. The periodical press of Paris is politically dependent; but it is well conducted, and has great influence. The 'Moniteur Universel' is the official morning journal of the government. The Imprimerie Impériale, or Imperial printing-office, employs about 500 workmen. The censorship of the press, which was early introduced, and was exercised, though with considerable indulgence, down to the revolution of 1789, was legally abolished after the revolution of 1830. A strict supervision of the press, however, by means of 'warnings' and fines, and the absolute power of government to suppress all hostile opinions, was re-introduced at the accession of Napoleon III.

Theatres and other Amusements.—Paris may be regarded as the dramatic capital of Europe. Every Parisian, even of the lowest class, esteems himself, more or less, a critic of the drama; and the fondness for this species of entertainments makes the theatres be almost nightly crowded to excess. The receipts of the theatres amount to about 10,000,000 fr. a year, of which a tenth goes to the support of public hospitals and charities. The most fashionable spectacles of Paris are the Italian and French operas. The former of these is confined to the representation of Italian operas, and its administration for many years has secured an almost unprecedented amount both of vocal and instrumental talent. The French opera house, belonging to the Académie Nationale de Musique, is partly supported by the goverment; the operas are represented by the pupils of the academy, the dancers in the ballet are the first in Europe, and the stage mechanism is brought to perfection. These theatres are supported chiefly by the higher classes, and as fashionable resorts may be considered analogous to the Italian opera houses in London. The other theatres, most of which are nightly crowded almost to suffocation, are supported by the middle classes, the small rentiers, and wealthy tradespeople. Vaudevilles and musical farces are the most popular entertainments; but among the lower classes frequenting the Porte St. Martin and Ambigu Comique, there is a marked predilection for the horrible, as depicted by Victor Hugo, Dumas, and other authors. The following is a list of the principal theatres in Paris:—

Opéra, or Académie de Musique.	Théâtre du Cirque.
Italian Opera.	„ du Palais Royal.
Théatre Français.	„ de la Porte St. Martin.
Odéon.	„ Gaieté.
Théâtre de l'Opéra Comique	„ des Folies Dramatiques.
„ des Variétés.	„ Impérial du Châtelet (opened 1862).
„ Lyrique.	Gymnase Dramatique.
„ de l'Ambigu Comique.	

The theatres, however, are by no means the only amusement of the Parisians, for they seem to be equally attached to their concerts, balls, and guinguettes, which abound in every part of the French metropolis. The Concerts Musard are in high estimation, and those in the Jardin Turc, near the Porte St. Martin, are almost equally celebrated. The bal masqué of the opera deserves notice also, as being the nearest approach made by the French to the revelries of an Italian carnival.

The restaurants, or dining-houses, are frequented by all classes of the inhabitants, female as well as male. It is an admitted fact—however it may be accounted for, whether it originated in advantageousness in an economical point of view, in the taste of the people for society, or whatever else—home, in the English sense of the word, has but few charms for the bulk of the Parisians, who may be said to live in public, dining in restaurants, spending their evenings on the boulevards, or in the theatres or cafés, and, on the whole, preferring an out-door to an in-door life. At the principal restaurants the bills of fare include hundreds of dishes, and the charges are necessarily high; but at many houses of great respectability dinners may be had for two or three francs, including half a bottle of vin ordinaire. Beaune and Pomard, however, are the wines commonly drunk by persons in good circumstances. The houses of the traiteurs are frequented almost exclusively by the tradespeople and lower classes; but they also supply dinners to people at their own houses at a fixed price for each dish.

Clubs, similar to those of London, have been established within the last few years; the largest and most respectable is the Club Anglais, the habitual resort of the leading men in the fashionable and diplomatic circles. The Jockey Club is frequented by sporting men, and a still more heterogeneous assemblage may be found at the Cercle. It may be remarked that these clubs have been much more numerously attended since the suppression of the salons and other *licensed* gambling-houses, which, till very recently, infested the metropolis of France.

Local Government.—Paris, with its environs, forms the department of the Seine, of which the form is nearly circular, and the diameter about 15 m. At the head of it is a prefect, under whom are 20 mayors, one for each of the 20 divisions of the town, and two sub-prefects for the country quarter. The following figures, taken from the official documents, relate to the budget of the city of Paris for 1863. The octroi produced the enormous sum of 82,646,175f., whereas, in 1844, it only gave 32,000,000f. Taken at so much per head, it costs each inhabitant of Paris about 50f., and each family from 200f. to 250f. To the produce of the octroi should be added 140,730f. for fines and seizures, and 1,723,561f. arising from the duty of 2c. per cubic metre of gas consumed, paid by the Parisian company in lieu of octroi duty. The total receipts, direct and indirect, of the octroi amounted to little short of 85,000,000f. Other receipts of the city, in 1863, were 7,500,000f., derived from public sales at the halles and rent of stalls; 514,324f. from the sewers; 4,913,392f. from hydraulic establishments; 2,262,447f. from the abattoirs; and 432,298f. from the entrepôts of wine and spirits. A grand total of 123,598,080f. of ordinary resources was realised in 1863, whereas those of 1847 did not exceed 43,000,000f.

The courts of Paris are less comprehensive than those of London, their jurisdiction comprising only the cap. and several adjoining depts.; but in all other respects Paris is as much the common centre of public business for France, as London is for Eng-

Digitized by Google

land. The Court of Cassation is the supreme court of appeal from all the tribunals of France, and the Cour des Comptes has authority to examine all the public accounts of the kingdom. The Cour Impériale confines itself to the trial of criminals in the dép. of the Seine; besides which there is a tribunal de première instance. Paris is likewise the permanent residence of the sovereign, the place of meeting for the legislature, the seat of all the ministerial bureaux, and of the public offices generally. It is the seat of an archbishop, and the head-quarters of the first of the twenty-two great military divisions of France. It has also a numerous corps of national guards, or volunteers, composed of twelve legions, comprising about 30,000 men. For mercantile purposes it has a chamber and several courts of commerce. Finally, it is the centre of almost all associations for public purposes.

Public Health.—Official reports show that the mortality is decreasing in Paris, according as large sewers are constructed and wide streets run through the narrow overcrowded quarters of the old city. On making a minute search into the records of Paris, it has been discovered that, at the commencement of the 18th century, from the year 1709 to 1719, under Louis XIV., the mortality was 1 in 28; and under Louis XV., from 1752 to 1762, it was still 1 in 30 inhabitants. From 1836 to 1841 it was 1 in 36; in 1846, 1 in 37; in 1851, 1 in 38; in 1856, 1 in 39; and in 1865 it was 1 in 40 inhabitants. The result is that at present there are 4,762 less deaths in Paris than there were in the year 1841. A writer, who has devoted his time to statistics, observes that the wellbeing of the population will serve for the measure of the mortality, and that mortality diminishes sensibly in every country where the condition of the population is improved. It is to be remarked with respect to the recent improvements in Paris, that of 8,260 houses taken down to make way for new streets 6,000 were situate in parishes where, in consequence of the overcrowding of the inhabitants, contagious diseases committed great ravages. These 8,260 houses, moreover, have been replaced by 24,947 new buildings more spacious and well calculated to diminish mortality among the occupiers. Another improvement to which the decrease of mortality in Paris may be attributed is the number of public gardens opened within a few years. On the 31st of December, 1853, there were only 540 acres of boulevards and public gardens, planted with 69,125 trees. In 1865 there were 770 acres open to the public, planted with 158,460 trees. The large sewers have likewise tended to decrease the mortality. In 1840 there were only 86,230 yards of sewerage; in 1865 there were not less than 100 miles completed, and 170 more under construction.

The supply of fresh water, moreover, so necessary for the salubrity of a town, has been greatly increased in Paris. In 1840 there were only 65,000 cubic metres of pure water distributed every 24 hours. In 1865 there were 136,834 distributed, which are to be increased to 300,000 cubic metres when the waters of the Huys shall have been brought to Paris, which was expected to be accomplished in the year 1866.

History.—When Gaul was invaded by Cæsar, Paris, then called Lutetia, was the chief town of the Parisii, a Belgic tribe, and was afterwards included by Augustus in the province of *Lugdunensis quarta* or *Senonia*. It attained no importance, however, till the middle of the 4th century, when it took the name of Parisii, and became the see of an archbishop. It was the favourite residence of the Emperor Julian, who, in his *Misopogon*, terms it his φιλη Λευκετια. Being taken by the Franks, under Clovis, in 494, it became the capital of his new kingdom. As late as the close of the 9th century, the walled part of Paris was still limited to the island of la Cité, though considerable suburbs were extending themselves along both banks of the Seine. It was greatly enlarged by Louis VI. and VII.; still more so by Philip Augustus; and after the battle of Poitiers, in 1356, new walls were raised on the N. side of the Seine. The treaty of Troyes, in 1420, gave Paris into the hands of the English, who held it till 1436, when it was recaptured by the French, and the English garrison put to the sword. The pop. of Paris, in the 15th century, is estimated by Dulaure at 150,000, and great architectural improvements had been gradually taking place; but the police was so bad, that both life and property were insecure, and morals were almost at their lowest possible ebb. The city was further improved by Francis I., and the circuit of the walls was greatly enlarged by Charles IX. and Henry IV., under whose reigns the entire suburb of St. Germains was rebuilt. In the religious wars of the 16th century, Paris was the scene of a revolt against the troops of Henry III., known as 'the day of the barricades.' It was held by the Leaguers, from 1585 to 1594, when it surrendered to Henry IV. The palace of the Luxembourg and the Palais Royal were built in the reign of Louis XIII., and the walls were so extended as to include nearly the whole space within the present boulevards; but the police was still wretchedly inefficient, and disorders were of almost daily occurrence, particularly in the turbulent quarter of the university. In the 17th century, Paris was the principal scene of the tumult of the *Frondeurs*, supported by the inhabs., against the French and Swiss guards; but notwithstanding these disturbances, the city still increased; churches, convents, and hospitals were built, the palace of the Tuileries was finished, the quays and boulevards were laid out, sewers formed, and other improvements effected at a great expense. The most memorable scenes connected with the history of the French Revolution, from the destruction of the Bastile, in 1789 to the assumption of imperial power by Napoleon, were enacted in the metropolis, which has long had a preponderating, though not always a beneficial, influence over the affairs of the country. Under the government of Napoleon I. Paris was greatly improved, and many of those scientific and other establishments were either formed or remodelled, which have contributed to increase its literary and scientific renown. The work of improvement proceeded slowly during the reign of Louis XVIII. and Charles X.; but, since the revolution of 1848, which placed Napoleon III. on the throne, great activity has been evinced in raising solid as well as splendid monuments, and entirely altering the old form and aspect of the city. Indeed there is not a town in the world in which such immense material changes have taken place within a comparatively short time as in Paris since the accession of Napoleon III., whose admirers are fond of repeating that 'he found it a city of bricks, and left it a city of marble.'

PARMA, a city of Northern Italy, cap. of the prov. of same name, on the little river of its own name, a tributary of the Po, 35 m. SE. Piacenza, and 33 m. SW. Mantua, on the railway from Milan to Bologna. Pop. 45,673 in 1862. The city is surrounded by a glacis, which forms a favourite public promenade. It is well built and laid out, especially its principal thoroughfare, which forms a part of the Flaminian way (via Flaminia). It has many good public and private

Digitized by Google

edifices; they are mostly, however, of brick, and none is remarkable for beauty; many of them are, also, in a decaying condition. The Farnese palace, though an immense pile, is little more than half the original design; it is raised on open arcades, and partly in a ruinous state. In the new picture gallery belonging to the latter are several masterpieces by Correggio, Parmegiano, Raphael, and the Carracci. The academy has also a museum, in which are many interesting antiquities from the buried city of Velleia (18 m. S. Piacenza), and an extensive and well-arranged library. Attached to the palace is the large Farnese theatre, designed by Vignola on the model of the ancient theatres, 300 ft. in length, and capable of accommodating some thousand persons. It is built entirely of wood, and is well constructed for hearing; but it has been long disused, and is in a very dilapidated and ruinous state. Another, but smaller, theatre exists on the same floor; and a third was finished in 1830.

The cathedral, an edifice of the 11th century, though in a mixed and semi-barbarous style, is, on the whole, a magnificent building; its fine dome is ornamented with one of the last and most celebrated productions of Correggio. The city has a great number of other churches, several of which possess some fine works of arts. It is a bishop's see, and a seat of the high court of revision for the province, besides several inferior courts; and was, till 1802, the seat of a university. It has now a superior school of divinity, medicine, and philosophy, attended by about 420 students; a college of nobles, founded in 1600; an episcopal seminary, some inferior schools, and several hospitals and other charities. The principal and most extensive establishment in the city is the famous printing office of the Bodoni, established in 1765: it has produced some of the best specimens of typography, especially some of the most splendid editions of the classics of which modern Europe has to boast. The city is supplied with water by a conduit, 15 m. in length. The *Palazzo Giardino* and a large public cemetery are situated without the walls. Parma has some silk and other fabrics; but its manufactures and commerce are comparatively insignificant.

Parma became a Roman colony A.U.C. 569. It suffered greatly in the civil war between Antony and Augustus; and was colonised anew by the latter, from whom it received the name of *Juliæ Augustæ Colonia*. It was anciently much celebrated for its wool.

'Velleribus primis Apulia, Parma secundis
Nobilis.' Martial.

PARNASSUS, a mountain-chain of Greece, prov. E. Hellas, and nom. Phocis, famous in Grecian poetry and mythology, the favourite resort of Apollo and the Muses, and especially sacred to Bacchus. It runs from WNW. to ESE., forming the connecting link between Mount Pindus and Mount Helicon; but the only part of it that requires any particular mention is its culminating point N. of Delphi, now called *Liakura*; lat. 38° 31′ 57″ N., long. 22° 38′ 36″ E. It rises 8,068 ft. above the sea, and being covered with snow during the greater part of the year, would have been rather an uncomfortable residence for the Muses, who inhabited its lower regions, especially the laurel groves in the vicinity of the Castalian fountain. Dr. Clarke, who ascended this celebrated mountain, describes (Travels, vii. 261) its summit as somewhat resembling that of Cader Idris in N. Wales; and adds that, after having been for years engaged in visiting the tops of mountains, he must still confess that he never saw anything to compare with the view from the summit of Parnassus. The Gulf of Corinth had long looked like an ordinary lake, and it was now reduced to a pond. Northwards, beyond all the plains of Thessaly, appeared Olympus, with its many tops, clad in shining snow, and expanding its vast breadth distinctly to view. The other mountains of Greece, like the surface of the ocean in a rolling calm, rose in vast heaps according to their different altitudes; but the eye ranged over every one of them. Helicon was one of these, and it is certainly inferior in height to Parnassus. One of the principal mountains in the Morea, now called Tricala, not far from Patras, made a great figure in that mountainous territory; it was covered with snow, even the lower ridges not being destitute of it. 'We looked down on Achaia, Argolis, Elis, and Arcadia, as upon a model. The higher region of the mountain is of limestone, bleak and destitute of all herbage, except a few alpine plants.' From the sacred town and temple of Delphi the mountain appears to have two summits, one of which was sacred to Phœbus and one to Bacchus.

——'Parnassus gemino petit æthera colle,
Mons Phœbo, Bromioque sacer.' Lucan, v. 72.

Running down the cleft between these two summits is the famous *Fons Castalius*, the genuine source of poetical inspiration. It is thus alluded to by Virgil, in connection with the neighbouring mountain—

'Sed me Parnassi deserta per ardua dulcis
Raptat amor. Juvat ire jugis, quâ nulla priorum
Castaliam molli devertitur orbita clivo.'
Georg. iii. 293.

Even at present it is by no means unworthy its ancient renown. It is clear, and forms an excellent beverage. The fountain is ornamented with pendent ivy, and overshadowed by a large fig-tree. Higher up the mountain is the Corycian cave, which, during the Persian war, afforded a safe retreat to the less adventurous Greeks after the battle of Thermypolæ. (Herod., viii. 36.) It is described by Mr. Raikes, the first modern traveller who has visited it, as a chamber 330 ft. in length, and nearly 200 ft. in breadth, with a roof studded with stalactites. Above this cave, and at a distance of about 80 stadia from Delphi, stood the town of Tithorea, taken and burnt by the army of Xerxes at the close of the Persian war. The ruins are near the modern village of *Velitza*. (See DELPHI.)

PAROS, a famous island of the Grecian Archipelago, group of the central Cyclades, to the W. of Naxos, from which it is separated by a strait, 5 m. across; Mount St. Elias, the most elevated point in the island, being in lat. 47° 2′ 46″ N., long. 25° 11′ 25″ E. Pop. estimated at 9,000. The island is oval-shaped, being about 12 m. in length by 8 in breadth. Though rugged and uneven, it is, speaking generally, extremely fertile; and, if well cultivated, would support four or five times its present pop. It produces considerable quantities of cotton, with corn, wine, and oil. Port Naussa, on the NE. coast of the island, is one of the best harbours in the archipelago, and was used, in 1770, as the rendezvous of the Russian fleet. Parecchia, on the site of the ancient city of Paros, on the W. coast of the island, is the capital. Its harbour is open to the W., and there are some sunken rocks in its vicinity, on one of which, the Superbe, a French line-of-battle ship, was lost in 1833. The present town consists of mean houses, which, however, are interesting, from their chiefly consisting of fragments of the old city, including portions of the shafts and capitals of columns.

Digitized by Google

The cathedral church is said to be the best in the archipelago.

Paros was famous in antiquity for its beautiful snow-white marble, whence Virgil has called the island *niveam Paron*. (Æneid, iii. v. 126.) The finest of the ancient statues, including the Venus de Medici, the Apollo Belvidere, and the Antinous, were formed out of this material. Indeed, the best sculptors used no other, '*omnes autem tantum candido marmore usi sunt a Paro insula*.' (Plin. Hist. Nat.) The quarries were situated about 4 m. from the city of Paros, and remain exactly in the state in which they were left by the ancients. Travellers state that they had been wrought with infinite skill, and that the blocks had been cut out with such precision that there was not the smallest waste.

According to Thucydides (lib. i.), Paros was originally settled by Phœnicians. It early attained to great wealth and consideration, and established colonies in Thasos and other islands. During the first Persian war it sided with the Persians, and, after the defeat of the latter at Marathon, the city of Paros was unsuccessfully besieged by Miltiades. Themistocles, however, rendered it tributary to Athens. It produced several distinguished individuals, among whom may be specified Archilochus, the inventor of Iambics. In modern times the only event of importance connected with the history of Paros is the discovery of the 'Parian, or Arundelian Chronicle.' This is a chronological account, cut in marble, of the principal events in the history of Greece during the period of 1318 years, beginning with Cecrops and ending with the archonship of Diognetus, *anno* 264 B.C. The chronicle for the last 90 years is, however, obliterated; and the inscription is in many parts a good deal defaced. The marble slab on which this chronicle is cut was purchased on the spot, in 1624, for the Earl of Arundel, whence it is now frequently called the Arundelian chronicle; and being brought to England in 1627, the inscription was soon after copied, translated, and published by Seldon and other eminent scholars. Unfortunately the marble afterwards met with the most barbarous treatment, having been broken, and a part of it employed, as is alleged, to repair a chimney in Arundel House. The portion that escaped this worse than Gothic usage was presented in 1667 to the university of Oxford, of which it is one of the most precious relics.

For a lengthened period the Parian chronicle was regarded as of unquestionable authority, and was referred to as such by all inquirers into ancient history. In 1788, however, its authenticity was assailed, in a singularly clear, able, and ingenious dissertation, by the Rev. John Robertson, who contended that it was altogether spurious, and had been fabricated in modern times. As was to be expected, this dissertation elicited various answers, by Mr. Hewlett; Porson, the celebrated Greek scholar; Gough, the antiquary, and others; and at present it seems to be generally concluded by the ablest critics and scholars, that the objections of Robertson have been satisfactorily disposed of, and that there is no good or sufficient reason for doubting that the Parian chronicle was really compiled about 264 years B. C.

PARSONSTOWN, or BIRR, an inland town of Ireland, King's Co., on the confines of Tipperary, on the Birr, a branch of the Lesser Brosna, 7½ m. above its confluence with the Shannon, and 62 m. WSW. Dublin. Pop. 5,220 in 1861. The town has a large square, in which is a pillar surmounted by a statue of the Duke of Cumberland, erected in commemoration of the victory of Culloden, in 1746, and some good streets. Its public buildings are the parish church, a fine R. Catholic chapel, the cathedral of the see of Killaloe, 3 meeting-houses for Independents, 1 for Quakers, and 2 for Methodists, a fever hospital, a dispensary, a court-house, and a bridewell. Near it are large barracks. It has various schools, and is the seat of a manor-court, general sessions, and petty sessions. It is also a constabulary station, and has two distilleries, a brewery, and an extensive retail trade. The river is navigable for 2 m. from the Shannon, for barges. Markets on Saturdays; fairs, Feb. 11, May 5, Aug. 25, and Dec. 10.

Close to the town is Birr Castle, the seat of the Earl of Rosse, the head of the noble family of Parsons, whence the town has its name. The castle, which is of considerable antiquity, has been completely modernised, and greatly improved by its proprietor.

PASCO, or CERRO DI PASCO, the principal mining town of Peru, dép. Junin, prov. Huanaco, in an irregular hollow on the table land of Bombon, nearly 14,000 ft. above the level of the sea, and 60 m. S. by W. Huanaco. Pop. varying at different seasons from 4,000 to 12,000. It is a mean, wretched place, which, previously to the establishment of the Peruvian Mining Company, in 1825, had not a house with a chimney, fireplace, or glazed window; and even now its dwellings are principally covered with thatch, a frequent cause of destructive fires. The town—of which the very *adobes*, or unburned bricks, partly used in some of the houses, contain silver—is so burrowed under, that the inhabitants are in constant danger of inadvertently falling into old mines, or rather pits, sometimes superficial, sometimes deep and fathomless, and half-filled with water. There are several hundred well-known mines, from which silver has been and still could be extracted in large quantities, provided a perfect drainage were effected. But during the revolution a great many of the mines were allowed to fill up with water, and only about 30 are now wrought for eight months a year. These mines have the advantage of being near a coal mine, which has of late years been opened; but turf and timber are the kinds of fuel most commonly used. The miners choose whether they will be paid in money or a proportion of the ore. In the former case they get four reals, or 2s. a day; but they prefer of course payment in ore, if the mine be productive; and sometimes realise, in this way, very high wages. But the gambling nature of the pursuit has the worst effect on all parties engaged in it. The miners are almost universally profligate, and involved in debt; and but few of the undertakers have made fortunes.

PAS-DE-CALAIS, a dép. of France, reg. N., formerly composed in the provs. of Artois and Picardy, between the 50th and 51st degs. N. lat., and 1° 35′ and 3° 10′ E. long.; having NE. and E. the dép. Du Nord, S. Somme, W. the English Channel, and N. the Strait of Dover, or *Pas-de-Calais*, whence its name. Area, 660,563 hectares. Pop. 724,338 in 1861. There are several chains of hills, but none of any considerable height. The Scarp, Lys, and Aa, rise in this dép.; besides which the principal rivers are the Liane, Canche, and Authie, having mostly a NW. course. Except about Boulogne, the coasts are generally low, and in some places bordered with sandy downs, which are, however, prevented from increasing to an inconvenient extent by being carefully planted. The soil is, for the most part, good; and agriculture is, on the whole, well conducted. Of the surface, 492,374 hectares are supposed to be arable;

Digitized by Google

46,210 in pasture; 21,852 in orchards and gardens; 43,107 in woods, and 18,845 in heaths and wastes. Near Boulogne, farms vary in size from 85 to 250 acres; but, in general, they do not exceed 140 acres. Few are cultivated by the proprietors, being usually let to farmers who pay a money rent, and are also charged with the payment of the land-tax. All kinds of corn, but principally wheat and maslin, and large quantities of beans, peas, and oleaginous seeds, are raised, and a good deal of land is devoted to the growth of beetroot. There are estimated to be nearly 200,000 oxen and cows, and 300,000 sheep in the dép.; the produce of wool averages about 662,000 kilogr. a year. The farmers, though not prosperous, are contented with their condition; and there are few paupers requiring permanent relief. Some coal is met with; but the greater part of that made use of in the dép. is brought from Belgium, and wood and turf are the principal species of fuel. About 10,000,000 kilogr. of beetroot sugar are annually made in this dép., a greater quantity than in any other French dép., that of the North excepted. Arras is famous for lace and ginger-bread. A portion of the pop. of Boulogne and Calais is occupied in the manufacture of tulles: in the arrond. of Bethune many hundreds are employed in making linen stuffs and yarn: and manufactures of cotton stuffs and yarn are pretty general. Spirits, leather, gunpowder, soap, glass, and earthenwares are also produced. Artesian wells (so named from the prov. Artois) originated in this dép. The Pas-de-Calais is divided into 6 arronds.; chief towns, Arras, the cap., Bethune, Boulogne, Montrens, St. Omer, and St. Pol. Calais and Boulogne are the principal seaports, and have a considerable coasting trade, and share in the cod, herring, and mackerel fisheries.

PASSAU (an. *Castra Batavia*), a fortified frontier city of Bavaria, circ. Lower Bavaria, of which it is the cap., on the Danube, where it is joined by the Inn, and also by the small river Ilz, 68 m. ESE. Ratisbon, on the railway from Ratisbon to Linz. Pop. 13,360 in 1861. Passau consists of the city proper, built in the angle between the Danube and Inn, and of three smaller portions beyond the Danube, the Inn, and the Ilz, the latter being within the Austrian dominions. These different parts are connected by bridges, and surrounded with fortifications, and are further defended by two citadels, and some inferior forts; this being, in fact, one of the most important fortresses in the line of the Danube. The defile, in which the town is situated, is highly picturesque, and it has a striking appearance from the river, though not generally well built. The cathedral, however, is a magnificent modern edifice, in the Italian style, and several of the other churches are handsome: the old Jesuits' college, now a lyceum, the bishop's palace, several hospitals, an orphan asylum, and the post office are the other principal public buildings. On a hill, adjacent to the Innstadt, is the shrine of *Mariahilf*, a celebrated place of Rom. Cath. pilgrimage. Passau is the seat of circle, police, and taxation boards, and has an episcopal seminary, a school of industry, manufactures of leather, tobacco, and pottery-ware, docks for ship-building, and an active trade both up and down the Danube.

It was long the cap. of an ecclesiastical principality, secularised in 1805. Here, in 1552, a treaty was concluded between Maurice, elector of Saxony, on the one hand, and Ferdinand, king of the Romans, on the part of the emperor Charles V., on the other, by which the latter agreed to set the landgrave of Hesse at liberty, and to allow the Protestants full freedom of conscience.

PATAGONIA, an extensive country of S. America, comprising nearly the whole of that continent S. of lat. 38° S., and having N. the territories of La Plata and Chili, S. the Strait of Magellan, separating it from Terra del Fuego, E. the Atlantic, and W. the Pacific. Little is known respecting this region beyond its coast outline. The Andes in Patagonia appear to consist of but one cordillera, the mean height of which may be estimated at 3,000 ft.; but opposite Chilloe there are some mountains probably from 5,000 to 6,000 ft. in height. (Geog. Journ., i. 157.) The W. coast is abrupt, very much broken, and skirted with a great number of irregularly shaped rocky islands. The E. coast has been most explored. The surface of the country appears to rise from the Atlantic to the Andes, in a succession of terraces, all of which are alike arid and sterile, the upper soil consisting chiefly of marine gravelly deposits, covered with coarse wiry grass. No wood is seen larger than a small thorny shrub, fit only for the purpose of fuel, except on the banks of a few of the rivers subject to inundation, where herbage and some trees are occasionally found. This sterility prevails throughout the whole plain country of Patagonia, the complete similarity of which, in almost every part, is one of its most striking characteristics. It is stated, however, by the Indians on the Rio Negro, which forms the N. boundary of Patagonia, that near the Andes wheat, maize, beans, lentils, and pease are raised. This latter region is not, however, placed under the same circumstances as the country more to the eastward, nor is it subject to the causes which mainly occasion its sterility.

A great deal of rain falls in the Andes, and the country immediately E. of the mountains is thickly wooded, and is injured by too much rain. This results from the moisture which the west winds, that prevail throughout most part of the year, bring with them from the Pacific, being condensed and precipitated in the mountains and immediately adjacent territory, so that after passing these regions the winds are quite dry; and E. winds, which are very rare in Patagonia, are those only which convey any moisture to the desert E. of the Andes. Porphyry, basalt, sandstone, containing numerous organic remains, and a friable rock, greatly resembling, but not identical with, chalk, are among the mineral formations hitherto remarked as the most prevalent in E. Patagonia. The zoology of the country is as limited as its *flora*. Guanacos are met with sometimes in herds of several hundreds, and their enemy the puma, and a small kind of fox, are almost the only other wild quadrupeds at all abundant, except mice. The latter are of many species, and so numerous that, according to Mr. Darwin, Patagonia, poor as she is in some respects, can, perhaps, boast of a greater stock of small *rodentia* than any other country in the world. (Voyage of Adventure and Beagle, iii. 215.) The condor and the cassowary are included among the few species of birds. The reptile and insect tribes present nothing remarkable.

The Patagonian Indians are tall and bulky, and, though not absolutely gigantic, they may be said, after rejecting the exaggerations of the early and the contradictory statements of later travellers, to be the tallest people of whom there are any accounts, the average height of the men being probably not under 6 ft. Their heads and features are large, but their hands and feet small; and their limbs are neither so muscular nor so large-boned as their height and apparent stoutness would induce one to suppose. Colour, a dark copper brown; hair, black, lank, and coarse, and tied above the temples by a fillet of plaited or twisted

Digitized by Google

sinews. A large mantle of guanaco skins loosely gathered about them and hanging from the shoulders to the ankles is, with a kind of drawers and loose buskins, almost their only article of dress, and adds much to the bulkiness of their appearance. They neither pierce the nose nor lips, but disfigure themselves greatly with paint. They lead a nomadic life, living in tents formed of poles and skins, and subsisting on the flesh of the wild animals they catch. Both men and women ride on horseback, and are often furnished with saddles, bridles, stirrups, spurs, and Spanish goods of various kinds, which they obtain from Valdivia and other places in S. Chili. Their arms consist generally of a long tapering lance, a knife or scimitar, if one can be procured, and the *bolas*, a missile weapon of a singular kind, carried in the girdle, and consisting of two round stones, covered with leather, each weighing about a pound. These, which are fastened to the two ends of a string, about 8 ft. in length, used as a sling, one stone being kept in the hand, and the other whirled round the head till it is supposed to have acquired sufficient force, when they are together discharged at the object. The Patagonians are so expert at the management of this double-headed shot, that they will hit a mark not bigger than a shilling with both the stones at a distance of 15 yards. It is not customary with them, however, to strike either the guanaco or the ostrich with them, but to discharge them so that the cord comes against the legs of the ostrich, or the fore-legs of the guanaco, and is twisted round them by the force and swing of the balls; so that the animal being unable to run, becomes an easy prey to the hunters. These people live under various petty chiefs, who, however, seem to possess but little authority.

Patagonia was discovered by Magellan in 1519. The badness of its harbours, which are mostly difficult and dangerous of access, and afford little or no security for vessels above the size of a brig, has hindered the formation of any European settlement, except at Port St. Julian, about lat. 49° 10′ S., and long. 67° 40′ W., where the Spaniards settled about 1779, but speedily abandoned the establishment. A few expeditions have been undertaken to the interior in the last century, and more recently by the officers of British ships of war, principally up the larger rivers; but the coasts are rarely frequented by any other than whaling vessels, and the nature of the country is not such as to hold out any hope of its soon emerging from its present state of barbarism.

PATMOS (mod. *Patino*), a small island of the Grecian archipelago, belonging to the Sporades, celebrated in ecclesiastical history as the place of St. John's exile during Domitian's persecution; 11 m. NW. Lero, and 20 m. S. the W. extremity of Samos; its chief town being in lat. 37° 17′ 2″ N., long. 26° 35′ 14″ E. Pop. about 4,000. It is of very irregular shape, about 10 m. in length, 5 m. in breadth, and 28 m. in circ. It has numerous harbours, of which that of La Scala, on the E. side, deeply indenting the island, is the principal.

Above the landing-place is a small village, comprising about 50 houses and shops. On the ridge of a mountain, overlooking the port, is the cap. of the island, comprising about 400 substantial stone houses: its streets, however, are steep, ill-paved, and extremely narrow, few being more than 8 ft. wide. The monastery of St. John's, on a mountain close to the town of Patmos, built in the commencement of the 12th century, is a pretty strong fortress, and commands a noble and extensive view of the sea and surrounding islands. It is peopled by about 30 monks, and has an attached church, and a library containing some early printed books and numerous MSS. The famous grotto, or cavern, covered by a chapel, where St. John is said to have written the apocalypse to the dictates of the Holy Spirit, is situated on the face of the hill, about half way between the town and the port. Some travellers state that it is not spacious enough to have afforded a habitation even for a hermit; but the monks, to quash all doubts as to its being really the retreat of St. John, show the crevices in the rock through which, as they allege, the divine commands were communicated to the apostle. However, there is not a sentence in the apocalypse to warrant the inference that it was written in a cave.

The island produces only a few grapes, and is furnished with corn and other articles of subsistence from the Black Sea, Samos, and Smyrna. The male inhabitants are chiefly seamen, and from their extensive intercourse with different European nations have become more enlightened than the generality of Greeks.

PATNA, a city of British India, presid. Bengal, prov. Bahar, of which it is the cap., on the S. bank of the Ganges, 144 m. ENE. Benares, and about 300 m. NW. Calcutta, on the railway from Calcutta to Benares. Pop. estimated at upwards of 300,000. Within the walls Patna is not much more than 1½ m. in length, by 3-4ths m. in average breadth; but, including its straggling suburbs, it extends for 9 m. along the banks of the river, and 2 m. inland. The town itself is very closely built, and surrounded with fortifications in the Hindoo style, which are now, however, completely decayed. At a short distance it has a very striking appearance, being full of large buildings, with remains of old walls and towers, and bastions projecting into the river, and backed by irregularly elevated land. It has, however, but one wide street, all the other thoroughfares being narrow, crooked, and mean. The houses are partly built of brick, and many have terraced roofs and balconies; but the greater number are of mud, with tiled roofs. E. of the city is a large suburb, with many well-built storehouses, and in the same direction are the gardens belonging to the palace of Jaffier Khan, two or three miles in circuit. The suburb of Bankipoor, where are most of the residences of the government officials, is W. of the city. Here is also a remarkable edifice erected during the governorship of Warren Hastings, and originally intended for a grain magazine, but now used as a depôt for military stores. Patna has a small citadel, but there are few public buildings worth notice; though the Hindoos, Mohammedans, Seiks, and other sects have many religious temples. The Portuguese, inhab. have a Rom. Cath. church; and there is a British seminary with about 100 pupils.

But though Patna be the seat of one of the 6 courts of circuit in the Bengal presidency, the residence of a zillah-judge, a collector, a commercial resident, and an opium agent, it has but few English inhab. The city is not celebrated for any particular manufacture; but most articles of foreign and domestic produce may be procured in its bazaars. The neighbouring country produces the finest opium and saltpetre, and great quantities of wheat and other grains, sugar, and indigo. The opium and saltpetre are monopolised by government, and produce a large revenue; but a considerable trade is carried on in the other articles. It was at this city that the English first established a factory in the Eastern provinces of Hindostan; and it is indebted to the European trade for most part of its growth and prosperity.

PATRAS (an. *Patræ*), a town and seaport of Greece, on the NNW. coast of the Morea, and on the E. side of the gulf of its own name, about 5 m.

Digitized by Google

SW. the mouth of the Gulf of Lepanto, 107 m. W. by N. Athens. Pop. 19,870 in 1861. The town is built amphitheatre-wise on the side of a hill rising from the shore, which has at its summit the acropolis, commanding a fine view of the surrounding coast and country. The fortifications are in good repair, and have been recently much enlarged. The interior comprises one broad and well-built street, with numerous narrow lanes and alleys lined with wooden tenements, the overhanging eaves of which nearly meet over the street. The Greeks have a few good houses, but those of the European consuls are the best. Every considerable house is surrounded with a garden well stocked with orange, fig, pomegranate, and other fruit trees, which give the town an agreeable aspect, and conceal the greater part of the poorer habitations. The only public buildings are two hospitals and several churches; the remains of ancient buildings are but inconsiderable.

The bay in front of the town being unsafe, and exposed to heavy seas, particularly in winter, vessels go a little farther up the gulf, where the port is situated, and where there is a mole for their security. Patras has a pretty extensive trade. The principal exports are currants (by far the most important article), oil, valonia, wine, raw silk and cotton, wool, skins, and wax. The imports here, as at the other Greek ports, consist principally of colonial produce, manufactured goods, salt fish, cordage, hemp, and deals, chiefly from the Ionian Islands and Great Britain, Venice, Trieste, Leghorn, and Marseilles.

The ancient Patra is supposed to have been founded by the Ionians. Heredotus enumerates it among the twelve towns of Achaia (i. 146). Its inhabs. took an active part, and the town suffered greatly in the Achæan war. After the battle of Actium, however, it was raised to its former flourishing condition by Augustus, who made it a colony by establishing in it some of his veterans. In Strabo's time it was a large and populous town; and in the beginning of the 2nd century it was still prosperous, though remarkable for the dissoluteness of its inhabs. (Pausanias, Achaic., c. 21.) It was the seat of a dukedom under the Greek emperors, and in 1408 was bought by the Venetians, from whom it was taken by the Turks, in 1446. It was pillaged by the Albanians in 1770, and was the stronghold of the Ottomans from 1821 down to the period of the emancipation of Greece.

PAU, a town of France, dép. Basses-Pyrénées, of which it is the cap., on the Pau, here crossed by a fine stone bridge of seven arches, in a fertile though marshy plain, 58 m. E. by S. Bayonne, on the railway from Bayonne to Tarbes. Pop. 21,140 in 1861. The town is regularly laid out and well built, consisting principally of one long and broad main street. It has several squares, or open spaces, and is environed by public walks. Its principal, and by far the most interesting edifice is the castle, in which Henry IV. first saw the light on the 13th Dec. 1553; it was founded by the princes of Bearn in the 10th century, is situated on a commanding height to the W. of the town, and forms an irregular collection of massive towers, having a fine terrace on the side fronting the river. It was much injured during the Revolution, having been converted into military quarters; but it has since been completely repaired and renovated. The chamber, memorable as the birthplace of Henry IV., retains its ancient portraits and furniture, and the tortoise-shell cradle of the king. There is a marble statue of Henry in the vestibule of the castle, and another statue in bronze in the *Place Impériale*. The other principal buildings comprise the prefecture, hall of justice, college, and one or two hotels.

Pau has a royal court of tribunals of primary jurisdiction and commerce, boards of taxation and forest economy, a royal college, an *académie universitaire*, a society of agriculture, a school of design and gallery of paintings, and a public library of 18,000 vols. Its manufactures include cotton stuffs, linen cloths or *toiles de Bearn*, and it has considerable dyeing establishments and tanneries: it has, also, a trade in manufactured products, and in wines, Bayonne hams, and salted geese. It has two large weekly markets, and three important annual fairs.

Pau has always enjoyed the reputation of being one of the most interesting cities of the S. of France. It is clean, airy, and abounds in every convenience and in most luxuries. It is a great resort for strangers, particularly English; and, excepting Bayonne, is probably the most desirable of any of the towns selected by foreigners as a residence. Excellent houses are to be obtained at a very moderate expense, and the markets are both abundant and cheap. There are generally 50 or 60 English families in Pau and its neighbourhood, and the number is upon the increase.

Besides Henry IV. Pau has produced several distinguished persons, among whom may be specified Marshal Bernadotte, king of Sweden, and Viscount Orthez, governor of Bayonne, who nobly refused to execute the orders issued by Charles IX. for the massacre of St. Bartholomew.

PAVIA (an. *Ticinum*), a city of Northern Italy, cap. of prov. of its own name, on the Ticino, 19 m. SSW. Milan, with which it is connected by railway. Pop. 25,006 in 1862. The city is surrounded with old walls, and communicates with a suburb across the Ticino by a bridge of seven arches, constructed in 1351. This structure, partly of stone, but principally of brick, is one of the most singular monuments of the 14th century: it is 300 feet in length by 12 in breadth, and is covered with a curious roof, supported on 100 pillars of rough granite. Pavia is a magnificent venerable city; but its buildings and its fame belong to another age, and it has long been in a state of paralysis and decay. From the bridge, the *Strada Nuova* or *Corso* extends through the centre of the city to a superb gate, begun under the viceroyalty of Prince Eugene. In this street the principal palaces of the Pavian nobility, mouldering and dismantled, are mingled with shops, churches, colleges, cafés, theatres, and hospitals. From the main street others of greater antiquity branch off at right angles, some terminating in *piazzas* opening before vast and cumbrous palaces, now half ruinous and dismantled. From its numerous public edifices, Pavia was formerly called the 'City of a hundred towers;' but these are now greatly diminished. It has, however, a ruined castle, once the residence of the Lombard kings, and several other buildings traced up to the time of the Lombards, particularly the church of St. Michael, in a barbarous and grotesque style. The church of *San Pietro in Cielo d'Oro*, which is said, though on doubtful authority, to contain the remains of St. Augustine, and which certainly contains those of Boëthius, is in the same early and rude style; but the venerable edifice is now converted into a granary or barn. The cathedral has little that is remarkable; it was begun in 1485, and is of large dimensions; but it yields in interest to the churches of the Carmine, San Francesco, and S. Salvador. The palace of Theodoric was destroyed in a popular tumult in the 11th century; and the tower in which Boëthius was confined

Digitized by Google

and wrote his famous treatise, *De Consolatione Philosophiæ*, no longer exists. On the site of the latter, however, is the Malespina palace, at the entrance of which is a marble monument and bust of the philosopher. The theatre and the university buildings are almost the only other structures worth notice; the interior of the former is rendered dark and gloomy by the black marble of which it is constructed, and the latter are magnificent rather by their extent than by any merit in their architecture.

The university of Pavia, the first and most frequented in Italy, was founded by Charlemagne, and restored by Galeazzo Visconti in the 14th century: but it owes its present form and institutions to the empress, Maria Theresa of Austria, and her minister, Count Firmian. It has faculties of law, medicine, and philosophy, being particularly celebrated as a school of medicine. It has no faculty of theology, but in every other respect its constitution is similar to that of Padua. It has 38 professors, 3 adjuncts, and 11 assessors, and, on the average, from 1,200 to 1,500 students. Its revenues are derived principally from treasury grants, legacies, municipal and communal funds, and fees paid by students on obtaining degrees, which last average about 150,000 *lire* a year. The professors have annual salaries of from 3,000 to 6,000 *lire* (120*l.* to 240*l.* sterling), and enjoy, by special privilege, the distinction of personal nobility. Several of the most distinguished names in the history of Italian literature and science have been professors in this university. Among others may be specified Vesalius, Cardan (a native of the city), Spallanzani, Volta, Scarpa, and Tamburini; and it has still to boast of many eminent teachers. The university has an extensive library, a fine botanic garden, instituted by the French, and a valuable collection of natural history, physical and anatomical museums. Students are lodged and boarded gratuitously, in three colleges attached to the university. The *Collegio Caccia*, founded by a noble family of Novarra, receives thirty boarders from that city and district; the *Collegio Borromeo*, a stately and venerable edifice, founded by the famous Cardinal Borromeo, supports thirty-six students; and the *Collegio Ghislieri*, founded by Pope Pius V., receives sixty students; but the greater number of the students are extra collegians. Pavia has also a gymnasium, a high school and female school, two hospitals, numerous asylums, and charitable institutions. It is a bishop's see, the seat of the superior court of the deleg., and a chamber of commerce. It has some silk manufactures, and a considerable trade in agricultural produce with Milan and the cities on the Po. It is connected with Milan, besides the railway, by a navigable canal, traversed by boats like the Dutch treckschuyts. A good deal of the cheese, called Parmesan, is made in this neighbourhood. About 4 m. N. Pavia is the celebrated Certosa, the most magnificent of Italian monasteries, founded by John Galeazzo Visconti in 1396, and dissolved, and in part stripped by the French, in 1798.

Ticinum, which was an important city under Augustus, began to be called *Papia* (whence its present name), during the Gothic dominion in Italy. In modern times it has sustained numerous sieges; but it is principally distinguished, in an historical point of view, by the great battle that took place in its vicinity on the 24th of Feb. 1525, between the French army, that had undertaken the siege of Pavia, under Francis I., and the Imperialists, under the viceroy Lannoy. The French were totally defeated. Francis, who had displayed the greatest heroism, and the King of Navarre, were taken prisoners; and exclusive of many generals and persons of distinction, between 9,000 and 10,000 private soldiers were left on the field of battle. The French army was, in fact, entirely destroyed; and there was quite as much of truth as of point in the laconic epistle addressed by Francis to his mother after the battle—'Madam, we have lost all except our honour.'

PAXO (an. *Paxos*), the smallest of the seven principal Ionian Islands, forming part of the kingdom of Greece, in the Ionian sea, 10 m. S. by E. Corfu, and about the same distance W. the main land of Greece; its N. point being in lat. 39° 14′ N., long. 20° 9′ E. Area, 26 sq. m. Pop. 5,009 in 1861. The island is oval-shaped, and extremely mountainous; its soil being stony, and so destitute of moisture, that in summer the inhabs. are obliged to procure fresh water from the neighbouring continent. The climate is extremely mild and agreeable; but the island produces little else than olives, almonds, and vines, the quantity of corn raised being altogether insignificant. Mules and goats are reared in considerable numbers, and fish are abundant on the coast. Port Gai, the principal port on its E. side, affords good anchorage for a few vessels: but a more secure harbour is formed by the channel between this and the neighbouring islet of Antipaxo. The town has a pop. of 4,000 persons, but in appearance is little better than a village.

PAZ (LA), a city of Bolivia, cap. dép. of its own name, 196 m. NNW. Chuquisaca, lat. 17° 30′ N., long. 68° 25′ W. Pop. estim. at 25,000. The city is situated on the E. declivity of the Andes, at an elevation of 12,170 ft. above the sea, and at no great distance from the sources of the Beni, a principal affluent of the Amazon. It has a cathedral, four other churches, several conventual establishments, and is a bishop's see, with very considerable revenues. It is the centre of a considerable trade in Paraguay tea.

La Paz was founded in 1548, and received its name in commemoration of the peace that ensued after the defeat of Gonzalo Pizarro and his associates. It suffered considerably a few years ago, during a revolt of the Indians, but still ranks as a city of some wealth and importance.

PEEBLES, an inland co. of Scotland, having N. Mid-Lothian, E. Selkirk, S. Dumfries, and W. Lanark. Area 354 sq. m., or 226,488 acres, of which a comparatively small portion only is arable. This is almost wholly a pastoral district; the surface consisting of mountain, moor, and bog, with the exemption of a limited extent of low, level land along the banks of the Tweed, which rises in and runs through the co. The highest mountains are in the S. part of the co. adjoining Dumfriesshire, where the Tweed has its source. The summit of Broadlaw rises 2,741 ft. above the level of the sea; and this, which is about 100 ft. above the altitude of the contiguous summit of Hartfill, is the highest elevation in Scotland, S. of the Frith of Forth. The hills are generally smooth, and afford good sound sheep pasture. In the low parts of the co. agriculture has been very much improved; but it is now pretty generally believed that tillage had been too much extended during the late war. The buildings on farms of any importance have been entirely renovated, principally within the last 30 years. The black-faced breed of sheep were, at no very distant epoch, diffused over the whole co., to the exclusion of every other; but, about 1795, Cheviots began to be introduced; and their numbers have since so rapidly increased, that, even in the parish of Tweedsmuir, which is the wildest and most exposed, there are now 3 Cheviots to 1 black-faced sheep. The total sheep-

Digitized by Google

stock at present in the co. may be estimated at above 100,000. Property in a few hands, farms being very large. Neither minerals nor manufactures of any importance. Peebles is divided into 16 parishes, and returns 1 mem. to the H. of C. Registered electors, 499 in 1865. Peebles is the only town of any importance. At the census of 1861, the co. had 1,982 inhabited houses, and 11,408 inhabitants, while, in 1841, this co. had 2,118 inhab. houses and 10,499 inhabs. The old valued rent was 4,328*l.*, the new valuation for 1864–5 was 98,169*l.*

PEEBLES, a royal bor. and market town of Scotland, co. Peebles, of which it is the cap., and the only town, romantically situated in a mountainous pastoral district, on the Tweed, at the point where it is joined by the Eddleston, 21½ m. S. Edinburgh, on a branch of the Caledonian railway. Pop. 2,045 in 1861. Peebles is divided by the Eddleston into the old and new towns. The main street runs E. and W., in a line nearly parallel with the Tweed. The houses are unusually substantial. It has a par. church, with a handsome spire, 2 Presbyterian dissenting chapels, an episcopal chapel, a town-house, and gaol. The grammar school enjoys a high reputation, and is well attended. The town is regarded as peculiarly salubrious, and is much resorted to in summer as a favourite country residence.

Peebles was long a hunting residence of the Scottish kings, particularly of Alexander III., who founded in it a monastery for Red Friars, in 1260, of which the ruins are still pretty entire. The Poem 'Peblis to the Play' was written by James I. of Scotland. Neidpath Castle, inhabited by the earls of March till 1778, stands on a rocky promontory overhanging the Tweed, ½ m. W. of the town. Mungo Park, the traveller, practised as a surgeon in Peebles for some time previously to his second mission (1805) to Africa. Before the passing of the Reform Act, Peebles was united with Falkirk, Linlithgow, and Lanark, in sending a mem. to the H. of C.; but it was then merged in the co. constituency.

PEGU, a former kingdom of India-beyond-the-Brahmaputra, forming subsequently the S. portion of the Birmese empire, and annexed to British India in 1853.

PEGU, a decayed city of British Burmah, and the an. cap. of the above kingdom, on the Pegu river, a tributary of the Irrawadi, 50 m. Rangoon. Lat. 17° 40′ N., long. 96° 12′ E. While it remained the cap. of an indep. state, it is said to have had a pop. of 150,000; but being taken in 1757 by the Birmese monarch, Alompra, he raised most of its buildings to the ground, and reduced its inhab. to a state of slavery. At present it consists of only two streets, one parallel to the river, and the other leading to the celebrated Shoe-madoo, or great pagoda. This, the most famous edifice in the former Birman empire, boasts of high antiquity, and is raised on successive terraces in a manner similar to the religous structures of the Mexicans, as described by Humboldt. It stands on an apparently artificial hill, the sides of which are sloped into two terraces, and ascended by steps of hewn stone. The lower and greater terrace forms an exact parallelogram, and is about 10 ft. in height; the upper and smaller terrace is of similar shape, and rises about 20 ft. above the lower terrace, or 30 ft. above the level of the ground: a side of the lower terrace is 1,391 in length, and of the upper, 684 ft. The earth forming the terraces appears to have been taken from the ditch which formerly surrounded the city, and which may still be traced, enclosing a quadrangular space nearly 1½ m. on each side. The brick walls sustaining the sides of the terraces were formerly covered with plaster, wrought into various figures, but they are now in a ruinous state. The area of the lower terrace is strewed with fragments of decayed buildings, but the upper is kept free from filth, and is in tolerable order. On the second terrace is the pagoda, a pyramidal building of brick and mortar, without excavation or aperture of any sort, octagonal at the base, each side measuring 162 ft., and diminishing in breadth abruptly till it becomes of a spiral form. Its entire height from the ground is about 360 ft.; it is surrounded by two rows of small spires, a great variety of mouldings and ornaments in stucco; the whole being crowned with the *tee*, a sort of umbrella of open iron work, gilt, 56 ft. in circumference, surrounded by a number of small bells, and from the centre of which formerly rose a rod with a gilded pennant.

Pegu has several other temples, but they are mostly in ruins; and the site of the ancient city is almost wholly under water, probably from neglect of the drains and sluices. Mindjeree Praw, king of Birmah, in 1790, endeavoured to restore to Pegu a portion of its former importance, by transferring thither the provincial government from Rangoon, but he did not succeed. Zangnomang, however, on the opposite side of the river, is a prosperous town, and adjacent to it, for many miles, is a succession of thriving villages.

PEKING or PEKIN (Chin. *Pih-king*, meaning 'the northern capital'), the modern metropolis of the Chinese empire, prov. Pechelee, in a vast sandy plain, between the Pei-Ho (which has its embouchure in the Gulf of Pechelee) and its important affluent the Hoen-Ho, within about 5 or 6 m. of each, and being united to the Pei-Ho by a canal; 562 m. N. by W. Nankin, and 100 m. WNW. the Gulf of Pechelee, in the Yellow Sea; lat. (observatory) 39° 54′ 13″ N., long. 116° 27′ 45″ E. Nothing certain is known of the population, except that it is very great: some writers estimate it at two millions, and others at three millions; it is probable, however, that even the smallest of these estimates is beyond the mark, and that probably it does much exceed, if it be not under, 1,500,000. A large portion of the space within the walls is occupied by gardens and enclosures; and there is no heaping up of one family above another as in European towns.

The city is divided into two principal portions, exclusive of the suburbs. The most northerly portion, which is nearly a perfect square, is called *nei-tching*, or the inner city; it contains the palace of the emperor and the principal government officers, and is mostly occupied by Manchoos, whence it is sometimes called the 'Imperial,' and sometimes the 'Tartar city.' The other, or more southerly portion, denominated the *wai-ching*, or outer city, is a quadrilateral rectangle, entirely occupied by Chinese, and is at once the seat of business and the residence of the great bulk of the population. Both divisions are surrounded by walls, the extent of which may be about 18 m. The walls of the Chinese city are 30 ft. in height, and 25 ft. broad at the base, and 12 ft. on the top, the slope being mostly on the inner side; but those of the imperial city are 40 ft. in height. Square towers project from the outer side at intervals of about 70 yards from each other, and each of the 16 city gates is surmounted by a tower nine stories in height, with port holes for cannon.

The principal streets are of great width and perfectly straight, running between opposite gates in the divisions of the city to which they respectively belong; those in the northern being, for the most part, better built, and preferable to those in

Digitized by Google

the southern division. The other streets, however, are very narrow, and are, in fact, mere lanes branching off at right angles from the principal thoroughfares. It is singular, that though the great roads leading to the capital be paved with large blocks of granite, the streets are not paved, which makes them dusty and disagreeable in hot and dirty, and, in parts, all but impassable in wet weather. The houses, which rarely exceed a story in height, are built of brick, and covered with tiles; but none but the great shops have either windows or openings in the front wall; most of them have a sort of terrace, with a raised balcony or parapet-wall, on which are placed pots of flowers, shrubs, or stunted trees. The houses in the smaller streets or lanes, many of which are occupied by public functionaries, are very similar to those in the larger streets; and the regularity with which the streets intersect each other, the uniformity in the size and appearance of the houses, and the absence of towers, spires, domes, and even of chimneys (of which not one is to be seen), give the city an extremely monotonous appearance, resembling, in fact, a vast encampment.

The shops, in the principal streets, make an ostentatious display of painting and gilding. Sky-blue and green, mixed with gold, are the prevailing colours upon the walls. The goods are not only displayed within, but exposed in heaps in front of the houses. Before these are generally erected wooden pillars, whose tops are much higher than the roofs of the houses, bearing inscriptions in gilt characters describing the goods to be sold, and assuring the buyer he will not be cheated. To attract more notice they are generally hung with various coloured flags, streamers, and ribands, exhibiting the appearance of a line of shipping, dressed in their different colours. Lanterns of horn, muslin, silk, or paper are arranged before the doors, and exhibit such variety of form, that the Chinese appear to have exhausted on them all the powers of imagination. The streets are peculiarly crowded, in consequence of the number of trades that are carried on in the open air. The numerous movable workshops of tinkers and barbers, cobblers and blacksmiths; the tents and booths where tea, fruit, rice, and other eatables are exposed to sale; the wares and merchandise arrayed before the doors; the troops of dromedaries laden with coals from Tartary; the wheel-barrows and hand-carts stuffed with vegetables, leave in the broadest streets only a very narrow space unoccupied. Room, indeed, is scarcely allowed for the frequent processions of men in office, with their numerous retinues and strange insignia, or for the pompous trains which attend at funerals and marriages. With the confused voices of the multitude buying and selling their various commodities, are mixed the cries of jugglers, conjurors, fortune-tellers, mountebanks, quack-doctors, comedians, and musicians. It is, however, a curious fact, that the crowd and bustle are wholly confined to the great thoroughfares, the cross streets and lanes being perfectly still and quiet.

At the four points, where the great streets intersect each other, are singular looking erections, somewhat resembling triumphal arches, but, in fact, monuments to the memory of those who had deserved well of their country, or who had attained an unusual longevity. They are built sometimes of stone, but more generally of wood, and consist invariably of a large central gateway, with a smaller one on each side, covered with a narrow roof, and painted, gilt, and varnished.

The northern city, which comprises the residence of the emperor and the principal government officers, consists of three inclosures—an outer, a middle, and an inner. The latter contains the imperial palace and the houses of the different members of the imperial household, the second is chiefly inhabited by Chinese merchants, and the third, or outermost inclosure, constitutes the open city. The inner portion, or that comprising the imperial palace and its dependencies, including gardens and pleasure grounds, occupies an oblong space about 2½ m. in circuit. This sacred inclosure, or 'forbidden city,' is surrounded by a high wall, similar to that surrounding the city, being, like it, flanked with towers, and faced with yellow tiles. Each side of the wall has a large gate surmounted by a tower; the walks, leading to the principal halls, being paved with large slabs of white and grey stone. The 'Meridian gate,' through which alone the emperor can pass, is by far the most splendid of all the approaches to the palace: here he distributes presents to foreign ambassadors, views the captives that may have been taken by his armies, and shows himself whenever he dispenses mercy. In the *Tae-ho-mun*, or 'gate of extensive peace,' which is a superb building of white marble, 110 ft. in height, the emperor receives congratulatory visits of ceremony from the various officers of his court; but by far the most sacred, as well as richest and most magnificent portion of the palace is the *Kaen-tsing-kiong*, or 'tranquil palace of heaven,' the emperor's private retreat, which none may approach without special permission. It is used also as a cabinet, where the great officers of state assemble for consultation, and where candidates for office receive their appointments. The palace of the empress is also very extensive; and beyond it is a gate leading to the imperial flower-garden, laid out in walks, filled with pavilions, temples, and groves, and interspersed with canals, fountains, lakes, and beds of flowers. Near the empress's palace is a library, alleged, by the Chinese, to comprise a collection of most books published in the empire. Within the precincts also is a temple, to which the emperor comes on certain stated occasions to obtain blessings from the manes of his ancestors, and to show his filial piety. Six palaces are occupied by the princesses of the imperial family, and other ranges of building constitute the residences of the emperor's stewards; besides which there are halls for councils and courts, and a large printing establishment. (Gutzlaff's China Opened, i. 62, 63.)

The reader, however, would form a very inaccurate notion of these buildings, if he supposed they bore any considerable resemblance to European palaces, or that the magnificence of the buildings at all corresponded with their imposing names. The truth is, that there is but little of pomp or splendour in the imperial residence. An English traveller, Sir John Barrow, says, 'The buildings that compose the palace, and the furniture within them, if we except the paint, the gilding, and the varnish, that appear on the houses even of plebeians, are equally void of unnecessary and expensive ornaments. Those who should rely on the florid relations, in which the missionaries and some travellers have indulged, in their descriptions of the palaces of Pekin and those of Yuen-min-yuen, would experience, on visiting them, a woful disappointment. These buildings, like the common habitations of the country, are all modelled after the form of a tent, and are magnificent only by a comparison with the others, and by their number, which is sufficient, indeed, to form a town of themselves. Their walls are higher than those of ordinary houses, their wooden columns of greater diameter, their roofs are immense, and a greater variety of painting and gilding may be bestowed on the different parts; but none of them exceeds

Digitized by Google

one story in height, and they are jumbled and surrounded with mean and insignificant hovels. Some writer has observed, that the king of England is worse lodged at St. James's Palace than any other sovereign in Europe. Were I to compare some of the imperial palaces in China to any royal residence in Europe, it would certainly be St. James's; but the apartments, the furniture, and conveniences of the latter, bad as they are, infinitely transcend any of those in China. The stone or clay floors are, indeed, sometimes covered with a carpet of English broad-cloth, and the walls papered; but they have no glass in the windows, no stoves, fire-places, or fire-grates in the rooms; no sofas, bureaux, chandeliers, nor looking-glasses; no book-cases, prints, nor paintings. They have neither curtains nor sheets to their beds; a bench of wood, or a platform of brick-work is raised in an alcove, on which are mats or stuffed mattresses, hard pillows or cushions, according to the season of the year; instead of doors they have usually screens, made of the fibres of the bamboo. In short, the wretched lodgings of the state-officers at the court of Versailles, in the time of the French monarchy, were princely palaces in comparison of those allotted to the first ministers of the emperor of China, at the capital as well at Yuen-min-yuen.'

The second inclosure, in the northern city, is called *Hwang-ching*, or the 'august city,' about 6 m. in circ., surrounded by walls 20 ft. in height, and entered by 4 large and 3 smaller gates. This section of the city comprises several idol temples, a depository of military stores, extensive public granaries, and a military seminary. It has also an artificial mountain in the centre of an extensive park. The third inclosure, or that called the 'imperial city,' contains the offices of the 6 superior tribunals of the empire. The Russian mission, the temple of *Yung-ho-Kung*, or 'of eternal peace,' the largest and most sacred edifice in the city, having connected with it an institution for the instruction of lamas for the service of Thibet. Here also is the national college, in which is concentrated all the learning and literature in China. All the literati of the empire, all the colleges and principal schools, are subordinate to this establishment, which nominates the examiners of the compositions required of candidates for civil offices. Manchoo, Chinese, and Russian literature meets here with equal attention, and all religions are sanctioned within its precincts. (Gutzlaff's China Opened, i. 65.) Indeed, it is somewhat strange that Pekin, the cap. of the most exclusive empire in the world, should comprise, besides its numerous temples and pagodas, a magnificent mosque, a Greek church and convent, and a Roman Catholic chapel.

The S. division of the city is the grand emporium of all the merchandise brought for sale from other provs.; and as this portion is not subject, like the other, to the rigour of military discipline, it is frequented by those who are in search of business, amusement, or repose. Its buildings do not, however, require any special notice. But it contains an inclosure, where sacrifices are offered up to the god of agriculture, and where the imposing ceremony of the emperor holding a plough annually takes place.

There are suburbs round most of the gates of the city, some of which extend more than a mile from the wall, and comprise several large temples, with a few other public buildings. The streets are not lighted at night. Sir John Barrow says that the cross-lanes were generally watered, but that that did not appear to be the case in the main streets. A large sheet of water, comprising several acres, within the N. division, furnishes an abundant supply to that part of the city, and to the palace; and a small stream, which runs along the W. wall, supplies that neighbourhood. There are, besides, numerous wells; but the water of some of these is nauseous, and, when mixed with tea, the well water is, to Europeans at least, particularly disgusting. But good potable water is brought from beyond the barriers.

Although Pekin cannot boast, like ancient Rome or modern London, of the conveniences of common sewers to carry off the filth and dregs that must necessarily accumulate in so large a city, it enjoys one important advantage rarely found in capitals out of England: no kind of filth or nastiness, creating offensive smells, is thrown out into the streets, a piece of cleanliness that perhaps may be attributed rather to the scarcity and value of manure than to the exertions of the police officers. Each family has a large earthen jar, in which is carefully collected everything that may be used as manure; when the jar is full there is no difficulty of converting its contents into money, or of exchanging them for vegetables. The same small boxed carts, with one wheel, which supply the city with vegetables, invariably return to the gardens with a load of this liquid manure. They are generally dragged by one person and pushed on by another, and they leave upon the road an odour that continues, without intermission, for many miles. Thus, though the city be cleared of its filth, it seldom loses its fragrance. In fact, a constant disgusting odour remains in and about all the houses the whole day long, from the fermentation of the heterogeneous mixture kept above ground, which in most European cities are carried off in drains. To counteract these offensive smells, they make use of a variety of perfumes, and strongly scented woods and compositions.

The highest class of inhabs. is composed of the Manchoo troops and officers, most of whom are in poor circumstances, though a few possess considerable property. Next to these rank the Chinese merchants, many of whom are extremely wealthy; and below these are the artisans and other labourers, most of whom come from the provinces to procure employment. The poor are employed in cleaning and watering the streets and gardens, and in cultivating the ground; but, notwithstanding the general discouragement of pauperism, and the severity of the police, it is alleged that there are in Peking many thousand persons, who, being without employment, have recourse to robbery and cheating. The cross streets are shut, and the others are patrolled at night. Hired carriages and sedan-chairs are common in all the public thoroughfares, but the males of the higher classes almost universally ride on horseback, though many of them keep their private carriages.

Peking is indebted for its importance to its being the residence of the emperor and the seat of government; and a very large proportion of its inhabs. depend for subsistence on employment in one or other of the departments connected with the army, the administration, or the court. It is to China in respect of literature what Paris and London are to France and England. The printing and bookselling business is very extensive. A great many works, especially upon history, issue from the imperial press, and are sold at a low price to the booksellers. It is not distinguished by any peculiar manufacture, unless it be that of coloured glass; nor has it any foreign commerce or trade, other than that directed to the supply of its own wants. This, however, is necessarily very considerable. The country round the city being sandy and poor, a large portion of its supplies are brought from a distance, partly from sea by the Pei-ho,

Digitized by Google

but principally by the Grand Canal and the Eu-ho, which connect it with Nankin, and most of the E. provinces. Mutton and beef, however, which constitute the principal food of the Manchoos, are brought principally from Mongolia. The Chinese prefer pork; and hogs, consequently, form a principal article of import. Geese, ducks, and chickens are the common domestic fowls, and in winter the shops are well supplied with partridges, pheasants, and other game.

A considerable portion of the taxes imposed on the different provinces is paid in kind; and a part of the rice and other grain so collected, being sent by canal to the capital, is stored in public granaries, whence it is issued to the troops, and others engaged in the public service. But notwithstanding this resource, it not unfrequently happens that the supply of corn proves deficient, and that numbers of the inhabs. are involved in the greatest privations. Tea, of excellent quality, is the common beverage, but they also use a strong spirit made of rice.

The Pei-ho is navigable for vessels of considerable burden to Tiensing, nearly 40 m. from its mouth; and it may be ascended in flat-bottomed boats to within 12 m. or 20 m. of the capital.

The early history of Peking is involved in obscurity, but it is generally regarded by native authorities as one of their most ancient cities. It is clear, however, from the statements of Marco Polo, who describes Peking under the name of Kambalu, that the N., Imperial, or Tartar city, was either built or restored by Kublai Khan. Marco Polo describes it, as it now exists, as having perfectly straight streets, lined on each side with booths and shops. The Mongul dynasty, founded by Kublai, continued to occupy this city till it was expelled from China, in 1367. In 1421, the third emperor of the Chinese dynasty of Ming transferred his residence thither from Nankin, since which it has been the cap. of the empire. Peking had to surrender to an allied Anglo-French force on the 12th of October, 1860.

PELEW ISLANDS. See art. POLYNESIA in this Dictionary.

PEMBROKE, a maritime co. of S. Wales, the most westerly in the principality having N. St. George's Channel and the co. of Cardigan, E. the latter and Caermarthen, and S. and W. the Bristol Channel and St. George's Channel. The coast line is very irregular, being deeply indented with arms of the sea, including Milford Haven and St. Bride's Bay. Area, 628 sq. m., or 401,691 acres. In the N. part of the county the highest point of the Prescelly Mountains rises to the height of 1,754 ft. above the level of the sea; but with this exception the surface elsewhere is merely undulating. It is watered by the Cleddu, Cleddy, and other streams, and, owing to the number of its deep bays, it has, in most parts, every convenience for water-carriage. The soil is various: in the S. it rests on a limestone and sandstone bottom, and is, speaking generally, very fertile: elsewhere the soil rests mostly on a slaty rock, and, though not so fertile as the other, it is still, with few exceptions, far from unproductive. Principal crops, wheat, barley, and oats. Lime, shelly-sand, or marl may almost everywhere be had; and, in fact, were this co. well farmed, it would be one of the most productive districts of the empire; but we regret to have to add that its agriculture is very far behind. There is a great want of drainage, and of a proper rotation of crops: the land is often foul and exhausted; and the implements of husbandry, and the mode of using them, are alike bad. Latterly, however, some improvements have been introduced. Leases for 14 years have been substituted for leases for three lives; and clauses have been inserted in the leases for the preservation of over-cropping. But a vast deal still remains to be done before agriculture in this and the adjoining Welsh cos. attains to even a medium state of advancement. Owing to the great mildness and humidity of the climate and the nature of the soil, this co. is extremely well suited for grazing and dairying; and a good deal is done in both departments: the cows used in the dairies are now generally a cross with the Ayrshire breed. There are some large estates; but property is, notwithstanding, a good deal subdivided: farms are of all sizes, but mostly rather small. The modern farmhouses and offices are generally good and commodious, but many are still very inferior, and very inconveniently situated. Not a few of the older farmhouses and many of the cottages have mud walls, about 5 ft. in height, with a 'wattle-and-daub' chimney, and are both mean and miserable dwellings. However, they are gradually becoming less numerous, and will, it is to be hoped, be at no distant period wholly extirpated. Anthracite coal, slate, and limestone are found in large quantities. Manufactures unimportant. Principal towns, Pembroke, Tenby, Haverfordwest, and St. David's. It is divided into 7 hundreds and 148 parishes, and returns 3 mems. to the H. of C., one for the co., and one each for the Haverfordwest and the Pembroke districts of bors. Registered electors for the co. 3,797 in 1865. At the census of 1861, the co. had 19,418 inhabited houses and 96,278 inhabitants; while, in 1841, Pembroke had 18,832 inhab. houses, and 88,044 inhabs.

PEMBROKE, a parl. bor., market town, and sea-port of S. Wales, co. its own name, of which it is the cap., on the margin of Downpool, a creek on the S. side of Milford Haven, 29 m. WSW. Caermarthen, 205 m. W. London by road, and 288 m. by Great Western and South Wales railway. Pop. 15,071 in 1861. The town is built on a tongue of land, dividing the creek into 2 branches, one of which runs on the N. side, while the smaller branch bends southward under the suburb of Monkton. It consists of one long street, running along the ridge of a hill, on which are sloping gardens; and, though it is the co. town, its small size and general quietness give it the appearance of a village. The public buildings comprise a town-hall, custom-house, and 3 churches, one of which is in the suburbs. St. Michael's, at the E. end of the town, is a cruciform structure of Norman architecture; St. Mary's is in the pointed style, and somewhat more ornamental: St. Nicholas', the parent church, is in the W. suburb of Monkton. There are several places of worship for dissenters, most of which, as well as the churches, have Sunday schools for children of both sexes. Pembroke has also a small endowed grammar school. On a high and rocky eminence W. of the town is the castle, an octagonal structure, nearly surrounded by water, which, on account both of its extent and beauty, ranks among the most splendid monuments of military architecture in the principality: it was built in the 11th century, and dismantled in 1649, after a brave defence by its royalist garrison. The keep is 75 ft. high to the dome, and 163 ft. in circumference at its base, the mean thickness of its walls being 14 ft. It consists of 4 stories, and is still covered in with a vaulted stone roof.

About a m. NW. the town, and within St. Mary's par., is Paterchurch, commonly called Pembroke or Paterdock, from the government dockyard transferred thither from Milford in 1814. It is regularly built, and contains the

Digitized by Google

houses of the persons connected with the dockyard. It has a handsome market-place and many good shops, most of which belong to the tradesmen of Pembroke. The dockyard occupies about 88 acres of land, and is one of the finest building-yards in the kingdom, capable of having on the stocks, at once, a dozen firstrate ships and several others of smaller size. There is also a dry dock, fitted for vessels of the largest class. A number of strong forts, at the Blockhouse, Thorn Island, Dale Point, Hook Point, South Stack Rock, Scoverton, and Bulwell, defend the dockyard, and several men-of-war are constantly stationed here. Pembroke serves, in a great measure, as a depôt for the neighbouring district. Coal is brought from a distance of about 6 m. eastward, and bituminous coal from Swansea, Llanelly, Newport, and the S. coast in general. The articles of export are confined to cattle, corn, and butter; the imports consist chiefly of articles of ordinary consumption. The borough of Pembroke was incorporated in the 10 Henry II.; and is divided into two wards, under a mayor, 5 aldermen, and 18 councillors. It has likewise a commission of the peace under a recorder. Pembroke returns 1 mem. to the H. of C., in connection with Tenby, Wiston and Milford. Registered electors of the united bors. 1510 in 1865. The electoral limits of the bor. were left untouched by the Boundary Act. It is also one of the polling places at elections for the co. Markets on Saturday: fairs, April 12, Trinity Monday, July 16, Oct. 10, and Nov. 30.

PENKRIDGE, a market town and par. of England, co. Stafford, E. div., hund. Cuttlestone, on the Penk (a tributary of the Trent), 5 m. S. Stafford. Area of township, 14,500 acres. Pop. 2,510 in 1861. The town, which is very ancient, is supposed by some to be the Pennocrucium of the Romans. The church, formerly collegiate, is a large building, in the early English style, with a square tower: the living is a curacy in the gift of Lord Lyttelton. The Wesleyan Methodists and Baptists have likewise their respective places of worship, with attached Sunday schools. There is also a charity school, in which 12 boys and 8 girls are boarded, clothed, and instructed; and a national school, established in 1816, furnishes instruction to about 200 children of both sexes. Petty sessions for the hund. are held here, and Penkridge is one of the polling-places at elections for the S. div. of the co. It is also the chief place of a poor-law union, comprising 21 pars. Market disused; fairs, April 30, and first Monday in Sept., a very large horse fair.

PENNSYLVANIA, one of the largest and most important of the U. States of N. America, between lat. 39° 40′ and 40° N., and long. 74° 40′ and 80° 40′ W.; having NW. Lake Erie, upon which it has a coast-line of 50 m.; N. and NE. the state of New York; E. New Jersey; S. Delaware, Maryland, and Virginia; and W. Ohio. It is separated from N. Jersey by the Delaware River and the upper part of Delaware Bay, which also unites it with the Atlantic. Length, E. to W., 300 m.; average breadth nearly 150 m.; area, 46,010 sq. m. Pop. 2,906,115 in 1860. The Alleghany Mountains occupy all the central part of this state, covering, with their ramifications, more than half its area. The W. and E. parts are comparatively level, the W. plain being by far the larger, and watered by the Alleghany and other tributaries of the Ohio, as the E. is by the Delaware and its affluents the Schuylkill, Lehigh, &c. The centre of the state is traversed by the Susquehannah. This river, the largest of those falling into the Atlantic in the U. States, rises in Oswego Lake (New York), near the sources of the Mohawk, and runs, with a very tortuous course, generally southward, till it falls into the bottom of Chesapeake Bay, lat. 39° 50′ N., long. 76° W., after an entire course of at least 500 m. It receives numerous tributaries, but its channel is so much interrupted that it is but little available for navigation. Most of the other rivers in the state are obstructed. The soil in the E. is partly light and sandy, but in the interior plains and valleys it is a deep rich loam; there are few absolutely sterile tracts, and, in general, this is one of the most productive portions of the Union.

The climate is changeable, though, upon the whole, one of the most agreeable and temperate in the U. States. The season of frost and snow seldom exceeds three months, the winter commencing from the 1st to the 15th of December, and terminating from the 1st to the 15th of March. The heat of summer is seldom oppressive, except in low situations. Near the sea-coast the temperature of winter is severe, varying in the months of January and February from 14° to 28° Fah. The elevated parts are healthy, but the climate there is a compound of most others. Pennsylvania yields all the fruits and products of the N. and middle parts of the Union, and is better adapted for the culture of the mulberry and grape than the greater number of the other states. Most of the finer fruits of temperate climates are raised in the greatest luxuriance, and the cider is particularly excellent. Almost every variety of grain is raised, but wheat is the staple, and Pennsylvania is emphatically a wheat-growing country. Most branches of agriculture are in a comparatively advanced state. Horses and cattle, especially the former, are particularly good; and this is, next to N. York, the principal wool-growing state of the Union. It is also remarkable for its mineral wealth, possessing vast quantities of iron, coal, and salt. Anthracite coal is found E. of the Alleghanies, in fields extending altogether over a vast area; and, within the last few years, a still more valuable produce has been discovered in mineral oil, or petroleum, of which immense quantities are now exported. Though the methods by which it is professed to discover oil in Western Pennsylvania are almost endless, from the divining rod even to charms and oil-smellers, yet the *modus operandi*, when once the site is determined on, is nearly the same in all cases. Over the spot chosen a timber framework is erected about 10 ft. square by 40 ft. high, and strongly bolted together. A grooved wheel or pulley hangs at the top, and a windlass and crank are at the base. A few feet from the derrick a small steam engine is stationed and covered with a rough board shanty. A pitman-rod connects the crank of the engine with one end of a large wooden 'engine-bob,' as it is called in some of our mining districts, placed midway between the engine and derrick, the beam being pivoted on its centre about 12 ft. from the ground. A rope, attached to the end of the beam nearest the derrick, passes over the pulley already mentioned, and terminates over the intended hole. A cast-iron pipe, from 4½ in. to 5 in. diameter, is driven into the surface ground, length following length until the rock is reached. The earth having been removed from the interior of the pipe, the actual process of boring or drilling is commenced. Two huge links of iron, called 'jars,' are attached to the end of the rope. A long and heavy iron pipe is fixed to the lower link, and in the end of this is screwed the drill, or punch, a chisel-shaped piece of hardened steel about 3 in. in diameter and 2 ft. to 3 ft. long. When all is ready, the drill and its heavy attachments are lowered into the tube, and

Digitized by Google

the engine is set in motion. With every elevation of the end of the beam the drill strikes the rock, the heavy links of the 'jars' sliding into each other, and preventing a jerking strain on the rope. The rock as it is pounded mixes in a pulverised condition with the water constantly dropping into the hole, and after a short time the drill is hoisted out, and the 'sand-pump' dropped into the hole. This is a copper tube about 5 ft. long, and smaller than the drill, having a valve in the lower end opening inwards, which, when the tube is dropped into the hole, the slimy fluid enters, and is hoisted out. As the drill is chisel-shaped, the hole made by it would not be round, so a contrivance is resorted to in order to secure that end, which is accomplished in part by the borer, who sits on a seat above the hole holding a handle fixed to the rope, and giving the latter a half twist at every blow. When the drilling is accomplished, another tool, called a 'reamer,' is inserted, which makes the hole round and moderately smooth. When the hole gets down to the point where the first reliable indications of oil are reached, the contents of the sand-pumps are carefully examined. The principal features of the geological formation of the Pennsylvania oil region are three strata of sandstone, with intervening strata of soapstone and shale. Indications of oil are found in the first and second sandstone, but the principal deposit is found in the third layer, at depths varying from 300 ft. to 800 ft. Should no oil be found in the third sandstone, the attempt is abandoned.

The well having been bored to the required depth, it is tubed by an iron pipe, with a valve at the lower end being run down the whole depth of the hole, the necessary length being obtained by screwing the joints together. As soon as tubed, and sometimes before, the oil and gas, should it be a 'flowing well,' rush out with great force and considerable noise. A pipe is connected with the upper part of the tube, and the oil is conducted into an immense vat holding from 500 to 1,200 barrels. The gas escapes into the air. If the oil should not flow, a pump-box, with a sucker-rod of wood, is inserted in the tube, and connected with the 'beam' of the engine. In many instances oil, gas, and water are all pumped up together, and are separated by a simple contrivance. The mingled fluids and gas are pumped into a small barrel. The oil and water fall to the bottom of the barrel, and run off by a pipe near the bottom into the large vat, where another separation takes place, the greater specific gravity of the water causing it to sink to the bottom. The gas escapes by a small pipe at the top of the barrel, and is conducted into the furnace of the engine, where it burns with a fierce and steady flame, frequently dispensing with the use of other fuel.

Bituminous coal is found nearly everywhere W. of the mountains, and large quantities are consumed at Pittsburg and Cincinnati, in the smelting of iron. Salt is obtained from springs to the amount of about 1,200,000 bushels a year. Marble, limestone, copper, and zinc are also met with. Manufactures are both various and extensive. Pittsburg, in the W. part of this state, on the Ohio, is the Birmingham of the Union; besides ironmongery of every description, including steam-engines and machinery, cutlery, nails, and stoves, it has numerous other manufactures. Cotton stuffs and yarn are extensively produced in Pennsylvania, which ranks next to Massachusetts, as a manufacturing state. The principal foreign trade of the state centres in Philadelphia; but it is partly also carried on through New York, Baltimore, and New Orleans, so that its total amount cannot be easily ascertained.

Pennsylvania has a very extensive system of internal communication by roads, railways, and canals. The New York and Erie, with its prolongation, the Atlantic and Great Western railway, cross the state in its whole length from east to west, and a dense network of other lines extends in all directions. The so-called 'oil regions' are served by a branch of the Atlantic and Great Western railway, and the immense quantities of petroleum exported from this district give rise to a vast traffic. There are also numerous canals, in part constructed by private companies, and in part by the state government. The grand canal between Philadelphia and Pittsburg, a distance of 395 m., connects the Delaware with the Ohio, and is second in importance only to the Erie canal in the state of New York. It has, with its various branches, an aggregate length of 590 m., and has besides two railroads connected with it, one 82 m. in length, extending from Philadelphia to Columbia, and the other, 36 m. in extent, crossing the Alleghanies, and uniting the E. and W. divisions of the canal. All these works belong to the state, the total expense of their completion having been nearly 4,000,000*l.* sterling. The principal private undertakings are the Schuylkill canal from Philadelphia to Port Carbon, 108 m. in length, with 129 locks, and completed at a cost of 2,500,000 dolls.; and the Lackawaxen canal, 25 m. in length, with which a railroad is connected, the total cost of both having been 2,000,000 dolls. The coal districts are traversed by upwards of 200 m. of railroads.

By the constitution as amended in 1838, the legislative power is vested in a general assembly, consisting of a senate and a house of representatives. The mems. of the latter, of whom there are 100, are chosen annually in each co. by all the white male citizens, 21 years of age, who have resided for a year in the state, and for 10 days immediately previous to election in the co. for which they offer to vote, and who have within 2 years paid a state or county tax. The senators, of whom there are 33, are chosen for 3 years, one-third being elected annually at the time of the election for representatives. The general assembly meets every year in January. The supreme executive power is vested in a governor, who holds office for 3 years. Judges are appointed by the governor, with the consent of the senate, for terms varying from 5 to 15 years. The state is divided into 19 judicial districts; Harrisburg is the legislative cap., but Philadelphia the chief city. The other principal cities and towns are Lancaster, Pittsburg, and Reading. The state militia consists of all free able-bodied white male citizens between 18 and 45. Pennsylvania has a university and 13 colleges, with numerous academies, female seminaries, and common schools. Total public revenue, 6,503,327 dolls. in 1863. The public debt amounted to 39,495,840 dolls. on the 30th November, 1863, and the interest of the debt, in 1863, was 2,007,377 dollars.

The pop. of this state is very mixed, including a great number of Germans, whose ancestors were originally attracted thither by the broad principles of toleration laid down by Penn. Religious creeds are no less various; Methodists, Presbyterians, Lutherans, Baptists, German Reformed, and Friends are, however, the prevailing sects.

Previously to its conquest by the English, in 1664, this territory had been colonised by the Dutch and the Swedes. It was granted by charter to William Penn, in 1680, and taken possession of by him in the following year, and continued afterwards a proprietary government. Pennsylvania acted a conspicuous part in the revolution: the

Digitized by Google

declaration of independence was drawn up in Philadelphia.

PENRITH, a market town and par. of England, co. Cumberland, ward Leath, in a valley watered by the Eamont and Lowther, which unite their streams about 1 m. below the town, 17 m. SSE. Carlisle, and 43 m. N. Lancaster, and 282 m. NWN. London, by London and North Western railway. Pop. 7,189 in 1861. The town, which mostly consists of a principal street along the line of road from Kendal to Carlisle, is clean and neat, built chiefly of red freestone, much improved of late years. The church is a large and handsome structure, nearly rebuilt in the beginning of last century: on its walls are many curious old inscriptions, and in the churchyard is a rude monument called the Giant's Tomb, consisting of 2 stone pillars, 10 ft. high and 13 ft. apart. The living is a vicarage in the gift of the Bishop of Carlisle. The Independents, Wesleyan and Primitive Methodists, and the Secession church of Scotland, have also their respective places of worship, with attached Sunday schools. A free school was founded here by Queen Elizabeth, and there are several charity schools. On an eminence W. of the town are the remains of Penrith Castle, a square structure surrounded by a deep fosse and rampart: it is supposed to have been built during the wars of the Roses, and was destroyed in the time of the Commonwealth. Northward is an excellent enclosed racecourse, on which races take place at the beginning of October. The inhabs. are principally employed in agriculture and linen-weaving; but the town has also a considerable retail trade, and large markets. Its situation, too, on the great road to the W. of Scotland, and in the neighbourhood of the lakes, occasions a large influx of visitors. Quarter and petty sessions are held here, and a county court is established in the town. Penrith is also one of the polling-places at elections for the E. division of the co. Markets on Tuesday and Saturday: fairs, April 25th and 26th, Sept. 27th, and Nov. 11th, for horses and cattle.

Penrith is a town of considerable antiquity, and often suffered in the border wars. There are some interesting objects in its vicinity, among which may be specified Lowther Castle, a magnificent modern structure, the seat of the Earl of Lonsdale; with Brougham Hall, Eden Hall, Greystoke and Dacre Castles, the Giant's Cave, King Arthur's Round Table, and other British antiquities scattered over the district.

PENRYN, a parl. and mun. bor., market town, and township of England, par. of St. Gluvias, co. Cornwall, and E. div. hund. Kerrier, on the slope of a hill at the mouth of a small river running into Falmouth harbour, 1½ m. NW. Falmouth (of which it may be considered a suburb), and 78 m. SW. Exeter. Pop. of mun. bor. 3,547 in 1861, and of par. bor. (which includes the neighbouring bor. of Falmouth), 14,485. The town consists chiefly of one wide street, crossed by three or four others of inferior size, its principal buildings being the town-hall (with a small attached gaol) and a custom-house. The church is a large plain building: the living is a curacy subordinate to the vicarage of St. Gluvias, the church of which is on the opposite side of the river. The Wesleyan Methodists and Baptists have, also, their respective places of worship, and there are three Sunday schools. The principal and almost only export is the granite which is quarried on the moors a few miles from the town, and this trade has of late been on the decline.

The bor. of Penryn was incorporated in 18th James I. Its mun. boundaries were considerably enlarged by the Mun. Reform Act, under which its corporate officers consist of a mayor, 3 other aldermen, and 12 councillors. Penryn has sent two mems. to the H. of C. since the reign of James I., the right of election down to the Reform Act having been in freeholders, resident leaseholders for 99 years, and householders, after a residence of six months. The Boundary Act enlarged the electoral limits of the parl. bor. so as to include with the old bor. the entire par. of Falmouth, with portions of the pars. of St. Gluvias and Budock. Registered electors, 882 in 1865. Markets on Wednesday and Saturday. Fairs, May 12, July 7, and Dec. 21.

PENZA, a government of Russia in Europe, between 52° 48′ and 50° N. lat., and 42° 26′ and 46° 41′ E. long., having N. the government of Nijnii-Novgorod, E. Simbirsk, S. Saratoff, and W. Tamboff: area, 14,350 sq. m. Pop. 1,888,535 in 1858. Surface, flat or feebly undulating; soil, extremely fertile; climate, mild. Rivers numerous, but except the Sura and the Mokcha, affluents of the Wolga, the others are of little importance. Produce of the corn crops estimated at from 9,000,000 to 10,000,000 chetwerts, of which large quantities are exported. Considerable attention is paid to the raising of cattle, sheep, and horses, particularly the latter. Forests very extensive and valuable. There are valuable iron mines near Troitzk, and in some parts there are quarries of mill-stones. Large quantities of coarse linen and woollen stuffs are prepared in the cottages of the peasantry, and there are besides several considerable cloth manufactories, with tan-works, soap-works, glass-works, and iron-foundries.

PENZA, the cap. of the above government, on its SE. frontier, near the Sura; lat. 53° 11′ N., long. 45° 38′ E. Pop. 25,132 in 1858. Most of the houses and government offices are of wood; but the cathedral, a large building, and some of the churches are of stone. Tanning and the manufacture of soap are extensively carried on, and it has a considerable commerce.

PENZANCE, a mun. bor., sea-port, market town, and township of England, par. Madron, near the W. extremity of co. Cornwall, and on the NW. side of Mount's Bay, 7 m. E. by N. Land's End, 96 m. WSW. Exeter, and 328 m. WSW. London by Great Western and Cornwall railway. Pop. 9,414 in 1861. The town consists chiefly of four streets, meeting at right angles in the market-place; they are all badly paved, and, for the most part, lined with mean-looking houses. A handsome town-hall, church, and places of worship belonging to Methodists, Presbyterians, and the Society of Friends, are its chief public buildings. It has a free school, three Sunday schools, a dispensary, a natural history society, and other societies, as well as the valuable museum, belonging to the geological society of Cornwall, which has its head-quarters in this town. Penzance is the market town of an extensive district, and the port from which the produce of the neighbouring mines and fisheries is exported in considerable quantities. Tin and copper are extensively wrought in the vicinity, and the fishery of pilchards is carried on with great activity. The gross customs' duties received at this port, in 1863, amounted to 12,150*l*. The harbour is not suitable, except for the smaller class of vessels, its depth at high water springs being only 13 ft., and at neaps only 9 ft. The pier is upwards of 600 ft. in length, having a lighthouse at its extremity. On the 1st of Jan. 1864, there belonged to the port 18 sailing vessels under 50, and 73 above 50 tons, besides two steamers of the aggregate burthen of 216 tons.

Digitized by Google

The mildness of the climate, and the fertility as well as beauty of the surrounding district, render it a desirable residence for invalids, many of whom are settled here, and for whose accommodation baths, libraries, and boarding-houses have been established. The scenery of Mount's Bay is extremely fine, and on its NE. side is St. Michael's Mount, a rock of conical form, having a base of nearly a mile in extent, and gradually diminishing to the summit, which is crowned with a chapel, its tower being 250 ft. above low-water mark.

The bor. of Penzance was incorporated in the 12 James I., when it was also made one of the coinage-towns of the duchy of Cornwall. The Municipal Reform Act considerably enlarged its limits; and, at the same time, it was divided into 2 wards, its municipal officers being a mayor, 5 aldermen, and 18 councillors. It has a commission of the peace, under a recorder, and a county court. Petty sessions for the W. division of the hund. are held here, and Penzance is one of the polling places at elections for the W. division of Cornwall. Among other distinguished citizens, Penzance has to boast of Sir Humphry Davy, born here on the 17th of December, 1778. He also received his early education, and served an apprenticeship as surgeon in the town. Markets on Thursday and Saturday; large fairs. Thursday before Advent, and Thursday after Trinity Sunday, for cattle and farming produce.

PERIGUEUX (an. *Vesuna*), a town of France, dép. Dordogne, of which it is the cap., on the Isle, here crossed by a handsome bridge, 68 m. ENE. Bordeaux, on the railway from Paris to Bordeaux. Pop. 19,140 in 1861. Périgueux consists of the city proper and Puy-St.-Front, which, previously to 1240, formed a separate town, but was then included within the walls. The old ramparts are now laid out in public walks, which give Périgueux a prepossessing appearance from without; but in the old city the streets are narrow, and rendered gloomy by the large, lofty, and antique buildings with which they are bordered. The quarter termed the New Town is, however, much more pleasant, and Périgueux has the advantage of many planted promenades, including the *Cours de Fourny*, in the highest part of the town, and an elegant public garden bequeathed to the city by a wealthy citizen. The cathedral of St. Front is probably one of the most ancient churches in France, if not in Christendom. It appears to have been founded towards the end of the 4th century, and restored about the beginning of the 6th; and portions of the edifice are still supposed to date from these remote epochs. Its architecture is partly Roman and partly Gothic, and, though it have little elegance to boast of, it is altogether a bold and majestic structure. A church, formerly belonging to the Jesuits, and having a remarkable piece of carving; the prefecture, town-hall, hospital, barracks, and a handsome theatre are the other principal buildings. Périgueux is a bishop's see, the seat of tribunals of primary jurisdiction and commerce, and has a communal college, a museum of antiquities, a botanic garden, and a public library of 16,000 vols., with manufactures of coarse woollen, hosiery, and liqueurs, and a considerable trade in cattle, poultry, game, and *patés-à-la-Périgord*. Its hog market is considered the largest in France.

Here are several Roman antiquities, including the remains of a more extensive amphitheatre than that of Nimes. The town continued long in the possession of the English, and was a stronghold of the Calvinists during the religious wars.

PERM, an extensive gov. of the Russian empire, extending from the 56th to the 62d deg. of lat., and from 52½ to 64 deg. E. long., having W. the gov. of Viatka, and E. that of Tobolsk. It is divided by the Oural chain into two unequal portions, the larger, or that on the W. side, being in Europe, and the smaller, or that on the E. side, in Asia. Area, 58,200 sq. m.; pop. 2,046,572 in 1858. More than one-half of the surface is covered with dense forests. The W. side of the government is traversed by the Kama, one of the principal affluents of the Wolga: the rivers on the E. side of the Oural mountains fall into the Obi. The climate is very severe, and the soil beyond the 60th deg. of lat. is hardly susceptible of cultivation. The mines in the Oural mountains furnish employment to about 100,000 workpeople, and yield large quantities of gold, silver, copper, iron, and salt. The corn produced in the government is insufficient for the consumption of the inhabs.

Perm, the chief town of the government, is situated on the Kama, at the junction of this river with the Jaguschikha. Pop. 13,185 in 1858. The town is built entirely of wood, and is the seat of an archbishopric, and has several public establishments. The inhabs. are principally employed in smelting the iron, copper, and other products, of the adjacent mines.

PERNAMBUCO, a city and sea-port of Brazil, inferior only to Rio Janeiro and Bahia in commercial importance, cap. prov. of its own name, on the Atlantic, at the mouth of the Capabaribe, 210 m. NE. Bahia. Pop. 65,255 in 1862. The city consists of the separate towns of Olinda, Recife, Boa-Vista, and St. Antonio; the first of which is on the mainland, and the others lie S. from it on a succession of low sandy banks, separated by salt-water creeks and different arms of the river, but connected with each other by two bridges. Recife, or Pernambuco Proper, the most southerly, about 4 m. SW. Olinda, is defended by the principal forts, and comprises the dockyard and the larger merchants' warehouses. Most of its streets are narrow; its houses are chiefly of brick, and sometimes from three to five stories in height, but usually less lofty. Several churches, the port admiral's residence, and the custom-house are among its most conspicuous public buildings. St. Antonio, the residence of the greater number of the provincial authorities, has broad streets and large houses, the ground-floors of which are appropriated to shops, warehouses, and stables. In St. Antonio are the governor's palace, formerly the Jesuit's convent; the treasury, town-hall, prison, barracks, several convents and churches handsomely decorated within, and several good squares; and it has a gay and lively appearance. A long embankment connects this town with the main land. Boa-Vista is extensive, but irregularly laid out; it has one handsome street, and comprises the residences of many of the richer inhabitants of the city, surrounded with gardens, various churches and convents. Olinda is beautifully situated on small hills, the sides of which are alternately either broken down abruptly, or covered with a most luxuriant tropical vegetation; amid which the white cathedral, the convents and churches, the bishop's palace, and numerous villas, have a most picturesque effect. But Olinda is in a state of decay, having been deserted by many of its pop. for Recife and the other parts of the city.

The harbour of Pernambuco is defended from the swell of the ocean by an extensive reef (*recife*); which continues along the whole coast from Maranham, at a variable distance from the shore, and has numberless breaks, through which ships approach the land. The reef, which is said to be of coral, is scarcely 16 ft. broad at top; it slopes off more rapidly than the Plymouth break-

Digitized by Google

water, to a great depth on the outside, and is perpendicular within to many fathoms. This natural breakwater forms the harbour; for though, at high water, the waves beat over it, they strike the quays and buildings of the town with diminished force. Along the sandy neck of land between Olinda and Boa-Vista, however, which is uncovered by the reef, the surf is very violent. The harbour consists of two parts: the Poco, capable of receiving vessels of 400 tons and upwards, entered across a bar on which there are from 17 ft. to 30 ft. water; and the Mosqueiras, much better protected than the former, but on the bar of which there are but 7 ft. water at ebb tide. The harbour is defended by several strong military works, the principal being the stone forts of Do Buraco and Do Brum; and has at its entrance a lighthouse with a revolving light. The exports consist principally of cotton to the extent of from 20,000 to 25,000 bags a year; sugar to the extent of from 50,000 to 60,000 tons; and hides and dyewoods. At an average, the value of the exports may amount to from 1,200,000*l.* to 1,400,000*l.* a year. The number and tonnage of vessels which entered the port in the year 1862-63 were as follows, according to British consular returns:—

Flags	No. of Vessels	Tons
British	167	69,953
United States. .	37	10,085
Argentine . . .	2	560
Austrian . . .	3	939
Belgian	1	349
Brazilian . . .	3	640
Danish	7	1,254
French	49	35,367
Hamburguese .	10	1,761
Hanoverian . .	3	519
Spanish	40	7,029
Dutch	8	1,309
Italian	6	1,091
Lubeck	1	301
Norwegian . .	3	1,007
Uruguayan . .	1	133
Portuguese . .	55	13,524
Swedish . . .	6	1,400
Total . . .	402	147,221

Great complaints are made by shipowners and captains of the exorbitant charges to which all vessels are subject at the port of Pernambuco. According to a report of the British consul (in 'Commercial Reports' received at the Foreign Office, between July 1st and Dec. 31, 1864), 'many commanders leave this port with a determination, loudly expressed, of never returning to it if they can possibly help it.'

There is an important line of railway from Pernambuco into the interior. The railway, opened Nov. 30, 1862, is a single line, commencing at Recife, and terminating at a spot near the river Una. It is 77½ Eng. m. in extent, and is the first portion of a projected line about 400 m. in length to a spot above the falls of Paulo Affonço, on the river São Francisco. The railway now open was constructed chiefly by English shareholders.

PERNAU, a fortified sea-port town of Russia, gov. Livonia, at the confluence of the Pernau with the N. angle of the Gulf of Riga. Pop. 6,800 in 1858. Pernau comprises an old and a new town, and two suburbs; and has three churches, and a Latin school. There is a bar at the mouth of the river, which can only be crossed by the smaller class of vessels; those of larger burden having to load and unload in the roads, where the anchorage is not very good. It has a considerable export trade, especially in corn, hemp and flax, and linseed.

PERONNE, a fortified town of France, dép. Somme, cap. arrond., on the Somme, 29 m. E. by N. Amiens. Pop. 4,445 in 1861. The town has a handsome town-hall, a Gothic par. church, in which one of the Merovingian kings is interred; but the edifice possessing the greatest interest is its old castle, in a tower of which Charles the Simple was confined by a count of Vermandois, and subsequently Louis XI. by Charles the Bold, duke of Burgundy. The latter circumstance forms the basis of one of the finest episodes in Scott's novel of 'Quentin Durward.'

Peronne has been frequently besieged by the Spaniards, but at most times unsuccessfully. However, it was stormed by British troops, with little loss, about a week after the battle of Waterloo. At the castle of Applincourt, near Peronne, the famous 'league' was concluded, in 1576, between Henry III. and the Duke de Guise.

PERPIGNAN, a strongly fortified town of France, dép. Pyrénées-Orientales, of which it is the cap., on the Tet, where it is joined by the Basse, 80 m. SW. Montpellier, on the railway over the Pyrenees to Barcelona. Pop. 23,462 in 1861. The town is built partly on a declivity, and partly in the plain beneath; and is separated by the Basse from *les Blanqueries*, or the new town, and by the Tet from a suburb. Each river is crossed by a bridge, that across the Tet consisting of seven arches. The fortifications of Perpignan have been improved considerably since 1815; and it is now one of the best fortified towns of France. It is surrounded with walls of brick and stone, flanked by several bastions, and encircled by ditches, beyond which are numerous outworks. It is further defended by a citadel, with a double line of ramparts, besides outworks; within which are the barracks and the castle, formerly the residence successively of the counts of Roussillon and of the kings of Aragon and Majorca. The town is not well built, though improving. There are a few good streets and squares, and some pleasant public promenades; but the public thoroughfares generally are fatiguing to pedestrians, from being paved with small round stones. The cathedral is a handsome Gothic edifice, of the 14th and 15th centuries, 255 ft. in length by 64 ft. in breadth, and remarkable for the beauty and boldness of its nave and vault; which last is sustained without the aid of any columns rising from the area of the building. The old church of St. John, an edifice of the 11th century, and several other churches; the Castillet, a defensive work of uncertain date, but similar to structures erected by the Moors in Spain; the town-hall, mint, arsenal (formerly a large convent), theatre, hall of justice, and prison, are the other chief public buildings. Perpignan is a bishop's see, the seat of tribunals of primary jurisdiction and commerce, and of boards of artillery, engineers, and customs. It has a communal college, a museum, a botanic garden, and a library of 13,000 vols., with manufactures of woollen stuffs, lace, corks, soap, and playing cards, and is an extensive entrepôt for the wines, brandies, liqueurs, wool, silk, oil, and other products of the S. of France.

PERSEPOLIS (the *Istakhar* of the anc. Persians), a celebrated city of antiquity, and during a considerable period the cap. of Persia, and residence of its monarchs, prov. Farsistan, in a fine plain at the foot of a mountain, against which it abuts, near the Araxes, or *Bundemir*, 30 m. NE. Shiraz; lat. 29° 59′ 30″ N., long. 53° 20′ E. The city appears to have covered a large surface; bricks, fragments of walls, and rubbish being found widely scattered; but the only extant ruins of any interest or importance are those of a vast building,

Digitized by Google

or rather series of buildings, supposed to have been the palace of Darius, burned by Alexander the Great.

The ruins occupy the summit of a platform about 1,430 ft. in length, 802 ft. in width on the S., and 926 ft. on the N. side, and about 50 ft. in height, formed by levelling the summit of a marble rock. This platform is ascended by easy flights of steps, cut into the rock on its W. side, and, when entire, consisted of 3 fronts or terraces, the mountain forming its E. side. The ruins consist of the remains of vast portals or gateways (one of which is formed of two enormous sphinxes), pillars, and walls, on which, but especially on the sides of the staircases, figures are cut in *basso relievo*, which are highly interesting as illustrating the costume and armour of the ancient Persians. Some of the remaining columns are 60 ft. in height, and though their capitals and form be very different from the classical model, they are extremely beautiful, and many of the sculptures are executed with infinite spirit. Numerous tombs have been cut into the mountain, on which, as already stated, the palace abuts. The most curious portion of the ruins of this vast palace consists of the inscriptions in arrow-headed or cuneiform characters, similar to those on the bricks of Babylon, found in great profusion on most parts of the walls. Very discordant opinions have been entertained with respect to the nature and value of these characters; but Dr. Grotefend, who has bestowed the greatest pains on the subject, has shown that the cuneiform marks are real *alphabetical* letters; that every inscription is treble (the first being in Zend, and the others in different Persian dialects); that the inscriptions are to be read from *left* to *right*; and that all of them belong to the period between Cyrus and Alexander. Heeren considers that these characters are the Ἀσσύρια γράμματα mentioned by Herodotus (iv. 87).

The history of Persepolis is, for the most part, hidden in obscurity; but it seems to be an established fact, that this city is identical with the *Istakhar* of Persian historians, the foundation of which is ascribed to Cyrus the Great, the *Jemsheed* of Oriental writers (whence the modern name of the ruins *Takhti-Jemsheed*). Herodotus, Ctesias, and the older Greek writers do not mention it, and it may not then have been a permanent royal residence. The inscriptions, however, show that it must, occasionally at least, have been visited by Darius, and the several monarchs called Xerxes. It is, at all events, certain that this city was the residence of the unfortunate Darius Codomannus, who, with his court, fled from it after his defeat at Arbela or Guagamela (anno 331 B.C.) by Alexander the Great. The conqueror soon after took the city, and gave it up to military execution. Alexander himself set the palace on fire, under circumstances which have been accurately as well as admirably depicted in Dryden's noble ode. But Arrian, a far less questionable authority, has given a very different account of the matter. He states that Alexander destroyed this palace contrary to the advice of Parmenio, not in a drunken frolic, but in cold blood, and on principle, in retaliation of the destruction of the Greek temples by the Persians. (Arrian, lib. iii. cap. 18.) From the few notices that now exist, it appears that Istakhar was an important city under the Sassanian dynasty. In the 7th century it was taken by the Mohammedans, who, having founded Shiraz, made it the capital of Persia; and Persepolis, long on the decline, rapidly sunk to a state of total decay. Persepolis has been regarded by some writers as identical with Pasargadæ; and it may be fairly inferred, from the statement of Arrian (lib. iii. cap. 18), that the palace destroyed by Alexander belonged to the latter.

PERSERIN, a considerable town of Turkey in Europe, pach. Albania, sanjiak Scutari, near the Drin, at the foot of a mountain, 72 m. ENE. Scutari. Pop. estimated at 10,000. Its inhabs. are principally Arnaouts, but partly, also, Mohammedans, and partly Christians. It is the residence of a Greek bishop, and of a military governor, who occupies a fort of no great importance. Albania is said to be principally supplied with fire-arms from its factories.

PERSHORE, a market town of England, co. Worcester, hund. its own name, on the W. bank of the navigable river Avon, 7 m. SE. Worcester, and 112 m. NW. London by West Midland railway. Pop. 2,905 in 1861. The town, which consists of one principal street, nearly 1 m. in length, is well built and paved, having many respectable and a few handsome houses. The church of Holy-cross, formerly attached to a Benedictine monastery, of which there are still some remains, is a large cruciform structure, with a lofty square tower. That of St. Andrew is small and mean looking; both livings are in the patronage of the dean and chapter of Westminster. The Wesleyan Methodists and Baptists have their respective places of worship; and there are three Sunday schools and a national school. Some of the inhabs. are employed in the manufacture of stockings; but the town depends principally on its retail trade for the supply of the neighbouring gentry. The petty sessions for the hund. are held here; and Pershore is the chief place of a poor-law union, comprising 40 pars. It is also one of the polling-places at elections for the E. div. of the co. Markets on Tuesday; fairs, Easter Tuesday, June 26, and last Tuesday in October.

PERSIA, a celebrated and very extensive country of Central Asia, between the 39th and 26th deg. N. lat., and the 44th and 62nd deg. of E. long. The political boundaries of the country have varied at different times with the character or exploits of its monarchs; sometimes embracing Armenia and Georgia on the W., Khârezm and Bokhara on the N., and Affghanistan on the E.; and sometimes being reduced to less than its natural limits. The latter on the S. are the Indian Ocean and the Persian Gulf; on the SW. and W. the Tigris; on the N. the Aras, the Caspian Sea, and an indefinite line in the desert, that separates Persian Khorasan from the territories of Khârezm or Khiva, stretching from the Attruck, which falls into the Caspian, to about the 36th deg. of N. lat. and the 61st deg. of E. long; whence a waving and undefined line, drawn southwards, separates the Persian territories on the E. from those of Caubul and Affghanistan. At present, however, the actual limits of Persia are much more circumscribed. The extensive province of Beloochistan, along the Indian Ocean, is quite independent. The Turkish territories embrace a large portion of country to the E. of the Tigris; and the country of Talash, to the S. of the Aras, belongs to the Russians. But still, even with these deductions, its area probably exceeds 450,000 sq. m.; though, from the vast extent of its deserts, the badness of the government, and the want of industry, the pop. does not probably exceed 8 or 10 millions.

Name.—The most ancient name of this extensive region is that of *Elam*. (Genesis x. 22.) The name of *Persia*, by which it was afterwards known in Europe, appears to have been derived from that of the province of *Fars*, or *Phars*, which being changed by the Greeks to Περσίς, was applied by them to the whole country. This designation has

Digitized by Google

not, however, been adopted in the East; the Persians, both in ancient and modern times, having styled their country *Iran*. The countries occasionally subject to the Persian monarchs beyond the Gihon, or Oxus, have usually been called *Aniran*, or *Touran*, that is, beyond Iran. (Ancient Universal History, v. 49, 8vo. ed.)

Face of the Country.—Persia may be considered as an elevated plateau, diversified by many clusters of hills, chains of rocky mountains, extensive plains, and barren deserts, with two extensive declivities, or lower tracts—one along the shores of the Persian Gulf and the banks of the Shat-el-Arab, and the other along the shores of the Caspian. The more southerly portion of the former consists of a succession of sandy or gravelly plains, where water is so scanty that vegetation is only seen in patches, where a well or rivulet enables the inhabs. to irrigate some portions of the soil. This region is called by the natives *Dushtitsan* and *Garmsir*, that is, the hot country; and, according to Morier, 'dreariness, solitude, and heat' are its principal characteristics: but in the province of Kusistan, to the E. of the Shat-el-Arab, this low tract is comparatively well watered by numerous streams, and its upper portion is naturally very productive. The low country along the banks of the Caspian is extremely well watered, and is covered with forests and verdure: it unites on the E. with the desert, which stretches from the E. shore of that sea to the Tartarian steppes.

The plateau, or elevated space which lies between these two lower slopes, and which rests, as it were, on two great ranges of mountains, may rise to an elevation of from 2,500 to 3,500 ft. above the sea, and on this again chains of mountains rear themselves to various altitudes, seldom, however, exceeding 7,000 or 8,000 ft. above the sea, and including sometimes between their ranges valleys of various dimensions, and sometimes rather appearing as islands in the extensive plain. The most striking features of Persia are its chains of rocky mountains; its long arid valleys without rivers; and, above all, its vast salt or sandy deserts.

Mountains.—There are two great chains of mountains, which, while they support the platean of Persia, on the N. and S., seem to be the stocks from whence all the minor ranges proceed. The most northerly of these, striking off from the Caucasus, crosses the Kur, to the W. of the plains of Mogân, and from Ardebeel runs parallel with the southern shore of the Caspian Sea to Asterabad. It thence passes in an E. direction to Mushed, and, stretching S. of Balkh to the Hindoo Koosh, is lost in the range of the Himalaya, and that stupendous central knot of mountains where the largest rivers of Asia take their rise.

This immense chain, in its extent of more than 20 degs. long., sends forth everywhere a number of branches, which in some places sink into the plains or deserts on the E. of Persia, and sometimes connect themselves with other elevations. Of these, the Sahund mountains, striking off from the lake Urumeah in a NE. direction, spread themselves over Azerbijan, and connect more or less with the spurs and branches of that extensive aggregation of mountains in which the Euphrates, Tigris, Zab, and other large rivers have their sources, and whence they derive their supplies. The range of the Taurus may be considered as a great branch from this central knot, which, spreading out in all directions, covers the pachalics of Diarbekir, Erzeroom, Bayazi, Van, and Koordistan, with piles of immense mountains. These rise to a great height between the lakes Van and Urumeah, particularly to the W. of the latter, where the peaks of Jewar are supposed to attain an altitude of 15,000 or 16,000 ft. above the sea. From this mass a chain of mountains, varying in height and breadth, runs SE. through Koordistan, bounding at a distance the valley of the Tigris, forming the high lands of Louristan and the country of the Buchtiarees, and giving birth to the rivers Kerah, Karoon, and Abzool. After passing to the S. of Shiraz, it trends still more to the E., and following at uncertain distances the line of the Persian Gulf and Indian Ocean, and occasionally almost disappearing, joins the ranges of Beloochistan and Mekran, and finally sinks into the deserts of Sinde, or is lost in the high grounds which diverge from the mountains of Affghanistan.

From these two ranges may be traced every ridge or knot of mountains that cover Persia as with a network of rocky lines; though many even of those which attain a great degree of altitude appear almost insulated. Among the loftiest peaks may be mentioned that of Demawend, 50 m. NE. Tehran, from 12,000 to 13,000 ft. above the sea; Elwund, near Hamadan, nearly as high; Sahund, near Maragha; and the Koh-i-Zerd, near Ispahan. These mountains include among them an intricate system of valleys and plains, differing in size and productiveness according to their nature and climate. Wherever water abounds they are fertile, but moisture is the boon of which nature is least liberal in Persia: except in some happy regions, even streamlets are rare, and of its few rivers scarcely any are navigable beyond a short distance from their mouths.

Rivers.—Though the Tigris, being assigned as one of the natural boundaries of Persia, can scarcely be set down as a Persian river, there are many large streams which descend from the Persian mountains to feed it. Of these, the principal are the Karoon, supposed to be the *Choaspes* or *Eulæus* of Herodotus, the Ulai of sacred writ. On the N. the Arras, or Araxes of classical writers, though a boundary line of the present Persia, derives much of its waters from Persian Koordistan; and the salt lake of Urumeah receives from the same hills, and from the Sahund mountains, a number of streams. The provs. bordering the Caspian are as remarkable for their moisture as the rest of the country is for its aridity; but their rivers are chiefly torrents, sometimes full and foaming, at other times nearly dry. The Kizzilozein, which rises in Ardelan, and, passing by Miana, falls into the Caspian in the province of Ghilan; the Herauz, which flows through Amol; and the Tejen, which passes by Saree, both in Mazunderan, are the largest. The Attruck and Goorgân, both considerable streams, falling into the SE. corner of the Caspian, are fed from the N. face of the Elbruz of Astrabad. It is a singular fact that from the mouths of the Indus to those of the Karoon and Euphrates, there is not found one river navigable more than a few miles from the ocean; and, in fact, the rivers that fall into the Persian Gulf and the Indian Ocean, on the shores of Laristan and Kerman, are mere torrents, almost dry during the long period of the summer and autumn heats.

Lakes.—In a country so arid there can be but few sheets of standing water, and those which do exist are chiefly salt. Of these the lake Urumeah, or Shakee, in Azerbijan, near the frontiers of Turkey, 36 m. W. Tabreez, is the most remarkable, both for size and intensity of saltness. It is about 300 m. in circumference, and has several islands. So saturated is the water with the salt it holds in solution, that immense quantities are deposited, assuming the appearance of a pavement under the shallow water near the brink, and its shores are

Digitized by Google

covered with saline efflorescence. Its waters, like those of the sea, appear to be dark blue, streaked with green, and are pellucid in the highest degree. The lake of Baktegan, near Shiraz, is another of these sheets of salt water, but on a smaller scale; as is the lake Zurrah, in Seistan. Excepting small pools among the mountains, which are the well-heads of streams, there are no lakes of any considerable size; but on the banks of the Caspian Sea, the beating of the surf, by damming up the mouths of streams, has given birth to some extensive lagoons.

Deserts.—Those which are the most striking of its physical features, Persia shares with a large portion of Central Asia and Africa: they consist of salt deserts, called by the natives *Kuveer*, and sandy wastes called *Sahra*. The great *Deria Kuveer*, or salt sea, as it is called, is of prodigious dimensions, and may be said to be to Persia what the great desert of Sahara is to Africa. It commences on the N., at the foot of the Elburz mountains, in about the 36th deg. N. lat., and, uniting with the desert of Kerman, extends S. to about the 30th deg.: on the other hand, it extends from about the 51st to the 60th deg. of long., occupying all the central and eastern portion of the country. It has a few oases, or cultivated spots; but they do not amount to 5 per cent of its extent. The cultivated portions of the country lie round the margin, as it were, of this vast desert plateau, principally to the NW., W., and SW., but partly also, as already seen, to the N., along the Caspian. S. of the desert is Beloochistan, and E. Affghanistan.

The nature of this desert varies in different places. In some the surface is dry, and even produces a few saligenous plants; in others, it is covered with a crackling crust of earth, white with saline efflorescence. A considerable portion is marshy; and, during winter, the melting of the snow and the increase of the torrents cause an accumulation of water in its lower parts, which, being evaporated in the hot months, leaves behind a saline incrustation in cakes upon a bed of mud. In extensive tracts sand predominates, either in the shape of level plains or wave-like hillocks, easily drifted by the wind, and sometimes so light and impalpable as to be carried to a vast distance by tempests. In some places the plain surface is broken by ridges of bare black rocks. Nothing can be more dreary than these dismal wastes. When the traveller has advanced some distance into them, the boundless expanse around, blasted with utter barrenness and hoary with bitter salt, glistening and baking in the rays of a fervid sun, only broken here and there by masses of dark rock, distorted by the powerful refraction into a thousand wild and varying forms, impress him with a sense of desolation that cannot be described.

Forests and Appearance of the Country.—Although the greater part of Persia is bare of vegetation, there are a few tracts exempted from this sterility. Among these are the provinces of Ghilan, Mazunderan, and Asterabad, bordering the Caspian Sea. The strip of low land constituting these provinces, with the N. face of the lofty mountains by which it is overhung, is covered with dense forests of oak, elm, beech, sycamore, and all sorts of fruit trees, amongst which the vine grows with the greatest luxuriance. The swamps and back waters are bordered with alders of magnificent size, and amongst the underwood is found abundance of box, of a magnitude unknown in Europe. In the S. the chain of Mount Zagros, including Persian Koordistan, Louristan, and the Buchtiaree mountains, is partially covered, and in many places densely, with forests of oak, which, however, does not attain any great size; and parts of Kuzistan are overrun with low jungle, the haunt of wild beasts. The district of Bebahan is rich in wood; and Kinneir praises highly the beauty of the finely-wooded vale of Ram-Hormuz, in Upper Kuzistan. But except in those districts, which bear but a small proportion even to the inhabited portions of the country, its appearance is dreary in the extreme, and lacks almost every thing that gives interest and beauty to European landscapes. It has no green plains or grassy slopes, no parks nor inclosures, no hedges nor woods, no magnificent seats nor comfortable-looking cottages, and, excepting in spring, even the portions cultivated round the villages can hardly be distinguished from the brown, arid expanse that everywhere meets and fatigues the eye of the traveller. The towns and villages consist mostly of mud houses, partly in a state of decay, and many of them wholly deserted; the roads are wholly impracticable for carriages, and unsafe even for horsemen.

Soil and Climate.—Lime in various shapes abounds everywhere, and being mingled in the glens and valleys with the remains of decayed vegetables and other detritus, forms a loamy soil of inexhaustible fertility. Indurated clay is often found to mingle with the calcareous matter. Artificial irrigation is here, almost everywhere, essential to the raising of crops. It is, in fact, the great business of the Persian agriculturist; and is well understood, having been practised from the remotest antiquity. Wherever, indeed, it is neglected, the land is, for the most part, barren and unproductive.

The climate varies to the greatest possible extent in different provinces; and the statement of the Younger Cyrus, that one extremity of his father's dominions stretched into those climates that were uninhabitable through heat, and the other into those uninhabitable through cold, is nearer the truth than might be supposed. The summer heats in the S. provs. are almost insupportable; while the cold of winter in those of the N. rivals that of Canada or Russia. In summer, however, even in the N., the heat is so great that all who can leave the towns and villages of the plains in the months of June, July, August, and September, resort to temporary lodgings or tents in the mountains. In the low provs. on the Caspian, the heat, though great in summer, is not so excessive as in the S., partly perhaps from the evaporation that takes place, as well as from the breezes from the sea: but the climate is here extremely unhealthy, and in the end of autumn putrid and intermittent fevers prevail to a great degree.

Minerals.—The mineral riches of Persia are almost wholly unexplored, iron, copper, and lead are, however, known to abound in all the great mountain ranges. The first is not largely produced, and much of the required supply is imported from Russia. Copper has been worked in several places, particularly in Khorasan and Azerbijan; but the distracted state of the country has hitherto prevented much progress being made in such undertakings. Of late, however, an enterprising native, whose mind has been enlarged, and his knowledge improved by a residence in England, has commenced working mines in Karadang under favourable appearances of success; and, from the connections he has formed, he may perhaps escape the extortions to which others of his countrymen would probably be exposed. The mines of Fars and Kerman supply the greater part of the demand for lead, though some is also brought from India. Antimony is found, but is little used. Gold and silver are said to exist, but there are no mines of either worth notice. The turquoise is

Digitized by Google

almost the only gem found in Persia, to which it is peculiar, the mines near Nishapour yielding this precious stone in an abundance and of a beauty unknown in any other part of the world. It is found disseminated in veins, nodules, and irregular masses, in beds of porphyritic conglomerates or limestone deeply tinged with iron, and often veined with micaceous iron ore. Garnets are also found in various parts, especially near Hamadan, of great size and beauty. Rock salt is very abundant all over the country; and the mines of Khameer furnish abundant supplies of sulphur, which is also found in other places. Coal has been discovered in Azerbijan, and naphtha is abundant, cheap, and useful.

Vegetable and Animal Productions.—As Persia embraces a variety of climates, its vegetable productions necessarily vary in different parts. The climate of many of the northern provinces resembles that of Europe, so that most European fruits and vegetables are found there in great perfection and abundance, with several belonging to more southern latitudes. The forests of European trees that cover the Caspian provs., and the woods that more thinly cover the southern mountains of Louristan and the Buchtiarees, have already been noticed; and to these may be added the stately chinâr, or *Platanus orientalis*, the Lombardy poplar, willow jujube tree, and, in the warmer parts, the cypress and pinaster. The plains are covered with a stunted and prickly herbage, among which the camel-thorn, wild liquorice, wild rue, and many aromatic plants, are conspicuous. Among the rest, the stalk of the gum-ammoniac rears itself on most of the gravelly plains of Irak and Khorasan, dropping its bitter tears upon the waste. The assafœtida plant abounds in parts of Khorasan. The orchards of Persia are rich in all the fruits of Europe: cotton, tobacco, the opium poppy, figs, vines, and the mulberry abound everywhere. The Palma Christi (castor-oil plant) is reared for lamp-oil in the warm districts, and the manna-bearing tamarisk is found in many low moist spots.

Among the animals are found most species common to Europe, with the addition of the camel, wild ass, wild sheep (or argali), lions, tigers (rarely), leopards, hunting leopards, tiger-cats, lynxes, and hyænas. There are many celebrated breeds of horses, of which those of the Toorkman plains and the Chaab district are held in highest repute. They have been a good deal improved by crossing with Arab horses, and though not handsome, at least in the estimation of Englishmen, have great strength, speed, and the most extraordinary powers of enduring fatigue. The Persians are extremely fond of, and take great care of their horses. They are clothed with the greatest attention, according to the season of the year; and in warm weather are put into the stable during day, and taken out at night. Next to camels and dromedaries, mules are in greatest repute as beasts of burden, and form the bulk of the caravans employed in transporting goods from one part of the country to another. There is a great variety of birds, and the Caspian is well supplied with fish.

Persia is not, in general, much infested by reptiles or insects; but the black scorpion and large centipedes are met with in various parts, and the plains in some places swarm in summer with immense phalangii and enormous spiders, the bite of which is venomous. The stories of the poisonous bug of Miana are believed to be grossly exaggerated; but no words can exaggerate the swarms of gad-flies and other stinging insects which set upon the traveller who enters the jungles of Mazunderan in summer, nor the clouds of musquitoes which are bred in its swamps and other low marshy parts of the country. Hosts of locusts, too, occasionally visit the land, destroying every green thing, and themselves supplying food to myriads of wildfowl.

Tenures of Land, and Agriculture.—Property in land is of a fourfold description: 1st, *Khalissa*, or crown lands; which, since the confiscations of Nadir Shah, have become very extensive; 2d, those which belong to private individuals; 3d, those granted to charitable or religious institutions; 4th, those granted by the king for military service, or in payment of salaries or annuities. Persons may become proprietors of land by inheritance, by purchase, by gift from the crown, or by reclaiming it from waste by producing the means of irrigation. In any of these cases, except the third, the proprietor's right (he not being the occupant) amounts to the privilege of exacting from the cultivator a tenth part of the produce. In the third case—that of being an assignee of crown lands—he may exact 3-10ths, which include all government dues, and what he can get from the farmers. If the assignment be on the estate of another, he can only demand 2-10ths. If the proprietor be the occupier of his own land, he makes what bargain he pleases with his cultivators; but the regulations for the protection of the husbandman have little or no practical influence. Almost the whole expense of government has to be defrayed by taxes on the land, the amount of which is perpetually varying, not only with the necessities of the government, but with the character and dispositions of the governors of the different provinces. The state of the country is such that the cultivator rarely expects to reap the fruit of his labours. His lands and houses are liable to be plundered by the retainers of every petty chief; and he and his family may, in an instant, be deprived of all their little capital, and reduced to beggary and want. Under such circumstances, agriculture must necessarily be in the most depressed possible state. No improvement is ever dreamed of; only the most easily worked portions of the soil are cultivated, and the instruments of husbandry are of the rudest and most primitive construction. Such, however, is the fertility of the land, that, despite the want of skill and attention on the part of the husbandman, wherever the means of irrigation can be commanded, from 10 to 20 returns of the seed are said (though we attach little weight to such statements) to be usually reaped, and in many places the produce reaches fifty and sixty fold. The grains chiefly cultivated are wheat, barley, maize, and rice, the latter being most abundant in the low and well watered provs. of Mazunderan and Ghilan. Oats are very little, if at all, raised. In the greater number of provs. there are two sorts of cultivation, wet and dry, or by means of irrigation and without this assistance. In the former, which is also by far the most extensive, the ground is roughly turned up by a wooden plough, sometimes slightly shod with iron, and drawn generally by two oxen; and the seed being harrowed in, the fields of each individual are laid under water as frequently as may be required, or as he has a right to; for the water of each stream is portioned out by *time* into shares, which are bought and sold as property. The water is derived either from natural rivulets or from under-ground canals, constructed with great skill, and carried to a great distance. These are the property of those who construct them; the natural streams belong to the sovereign, or to those who have purchased them, or on whom they may have been bestowed. All disputes about irrigation, like those on other subjects, are settled by the ketkhoda (magistrate) or elders of the village. The dry cultivation is con-

Digitized by Google

ducted, as to tillage, in nearly the same way as the other, but the grain is left to be nourished by rain only; so that, in this arid country, it must be confined to particular spots which experience or observation have pointed out as fit for it. Manure is very rarely applied to corn-land. Near cities, the melon, cucumber, and vegetable grounds are enriched with manure from the soil of the caravanserais, &c.; and in the neighbourhood of Ispahan pigeon dung is so highly valued in the culture of the fine melons, for which that district is celebrated, that pigeon-houses are built for the purpose of collecting this manure, which sells at an enormous price; but these are almost the only instances in which the land is artificially assisted. The use of lime as a manure is unknown in this as in other Asiatic countries, and fallows appear to be the only means resorted to for the improvement of the land.

Sheep, particularly the large-tailed variety, are everywhere very abundant. Their flesh is almost the only meat used as food, exclusive of poultry and game, beef not being at all esteemed, nor of good quality. Sheep's wool is universally used for clothing, and sheepskins, with the wool on, for jackets and cloaks. The property of the wandering tribes of Persia consists of sheep, with cattle, horses, camels, and asses, in large flocks and herds. Wool might become a very valuable article of export. In Kerman they have a breed of goats which yield a down not much inferior to the Cashmere wool, which might be greatly increased all over the mountainous parts of the country.

Manufactures are chiefly confined to articles of home consumption. Till lately almost all the clothing of the poorer classes, both cotton and woollen, was home-made, but for some years past most of the coarse chintzes and printed cottons in use have been supplied from England and Russia by way of India, Turkey, and the Caspian. Still a great deal of cotton cloth is made, both plain and printed, some of which goes to Russia and Turkey. In silk, also, a good deal is done; the fabrics resembling gros-de-Naples, taffetas, satins, velvets, brocades, and handkerchiefs, produced at Cashan, Yezd, Mushed, Astrabad, Ispahan, and many other places, are not only celebrated, but in request for export to Russia and Turkey, as well as for home consumption. Besides these, shawls are manufactured at Kerman, of the wool of that country, in imitation of those of Cashmere, and which, though deficient in softness and fineness, are still a handsome fabric, and in great request both for home use and exportation. Carpets and felts for sitting on are also made in various parts, the best of the former being produced at Herat, and in the central districts of Irak, and generally by the wandering tribes. The best are made in Khorasan, but they are chiefly for use in the country, few being exported. There are also manufactures of arms, swords, daggers, guns, and of cutlery, as scissors and knifes. The former are chiefly made at Shiraz and Mushed; the guns of Kermanshah and its vicinity are highly prized, and the cutlery of Ispahan and Shiraz has obtained some celebrity in Persia, but the knives and scissors of Birmingham are so far superior in cheapness and quality, that there is no great demand for the native wares. China ware, and all superior pottery, is imported; but a little coarse glass is manufactured in the country. There is also a manufactory of leather and saddlery at Hamadan.

Commerce. — In a country where there are no made roads, navigable rivers, or canals, and scarcely any sea-ports or shipping, and where there is but little security for property, it might be inferred that there can be no commerce. Yet, with all these disadvantages, Persia has a good deal of trade, and there is no inconsiderable degree of commercial spirit among its inhabs. The means of land-carriage, as over most of the E., is by caravans of camels, mules, and small horses, called yaboos, for there is not a wheel carriage in the country. The two latter are particularly suited to the stony roads and high mountain passes which occur in almost every day's journey; and in this way is brought the whole merchandise from Bokhara, Caubul, much of that from India, and from all the nearer countries, to the various marts; the returns being transported in like manner.

The only seaports are Bushire, Bunderabbas or Gombroon, Congoon, and some still smaller places on the Persian Gulf; and Euzellee, Balfroosh, and Asterabad, upon the Caspian. Of these Bushire, on the Gulf, and Balfroosh and Euzellee, on the Caspian, are the most considerable, the former being the mart of all the trade with India, and the two latter of that with Russia; and from these the communication with the interior is kept up by caravans, as already mentioned.

The principal trade of Persia is with India, Turkey, Russia, Bokhara, and Affghanistan, and of late direct with England. From the first the imports are chiefly indigo, chintzes, muslins, and calicoes, gold and silver brocades, precious stones, china, and earthenware. Sugar and sugar-candy, cashmere shawls, iron, lead, copper from Turkey. European goods from the Levant, and specie. From Russia iron, broadcloth, coarse and fine printed calicoes, gold lace, and metal buttons; trunks of all sizes, tea, coarse cutlery, leather glass-ware, tea-urns, and copper in sheets, quicksilver, furs, paper, and cochineal. From Bokhara black lambskins, raw hides, dried prunes, rubies and other gems, shawls, china ware, camblet; Indian and Russian produce by that route. From England broad cloths and narrow woollens of all sorts, cotton manufactures, imitation shawls, jewellery, arms, cutlery, watches, spectacles, earthen and glass-ware, iron, tin, and copper. The exports are chiefly, to England, silk, gall-nuts, a little wool, madder, yellow berries, occasionally a few pearls and precious stones, and specie, to be converted into bills at Constantinople. To India, specie, dried fruits, tobacco, wine, drugs, dates, sulphur, turquoises, Kerman shawls, rose-water, swords, horses, greyhounds, and raw silk. To Turkey, grain, raw silk, tobacco and pipe-sticks, cotton, lamb and fox skins, carpets, silk manufactures, cotton do., salt, sheep; besides foreign articles in transit from India and Bokhara. To Bagdad much the same as to Turkey; to the Uzbecks and Turkmans, Kerman shawls and woollens, silk stuffs, gold embroidery, copper ware from Cashan; cotton goods, arms, Hamadan leather, shoes and clothes, turquoises, sugar, raw and refined, opium, and some Indian goods. To Arabia, wheat, dates, dried fruits, rose-water, cloaks. To Russia, raw silk and cotton, rice, grain, timber, tobacco, raw hides, lambskins, fish, gall-nuts, naphtha, drugs, turquoises, Kerman shawls, silk and cotton goods.

Silk is the principal article which Persia has to offer as an export; but the whole amount of this and of other produce which she sends to Europe is small compared with the value of foreign goods she in general receives annually from that quarter. The balance of her trade with Europe is, therefore, very much against her. Mr. Abbott, British consul-general, gives the following estimate of the imports and exports of Persia (Commercial

Digitized by Google

Reports received at the Foreign Office between July 1st, 1863, and June 30th, 1864):—

	£
Imports.	
Cotton Manufactures as in ordinary Years, about 50,000 Packages	1,240,000
Refined Sugar, Tea, Cloth, and other European articles, exclusive of those of Russia	220,000
Exports.	
Silk, say 9,000 Packages	£351,000
Other Articles	183,000
	534,000
Balance against Persia in ordinary Years in her Trade with Europe	£926,000

This statement does not embrace the trade carried on in the countries of Khoee, Selmas, Oroumieh, Suldooz, and the neighbouring districts of Koordistan, most of them fine, and for Persia well inhabited countries, receiving their supplies of European goods direct from Constantinople, and carrying on a traffic with the Russian possessions north of the Arras.

Shipping.—Scarcely any vessels belong to Persian owners. The trade between India and the Gulf is carried on in bottoms belonging to Indian, Arab, or Armenian merchants resident at the sea-ports; and that of the Caspian, in vessels from Astrakhan. As the Russian government discourages any vessel in that trade which is not owned by one of their own subjects, the Persian or Armenian merchants who have embarked in it generally become subjects of Russia, which leads to their ultimate residence in Astrakhan. There are, however, some vessels, of from 50 to 150 tons, built at Euzellee.

Money.—The coins chiefly current in Persia are bajoglees, or Persian ducats; sahebkerans, commonly called koroonees, a silver coin, nine of which go to the bajoglee; and copper coins, called pool-e-siah, or black money. There are also several pieces of one or more abbassees or shahees, the abbassee or shahee being the fourth or fifth part of a koroonee, there are about four pool-e-siahs in an abbassee. The old tomân of gold, and real or rupee of silver, are now seldom seen, although used at times in calculation, the tomân being equal to 10 koroonees, or 8 reals. Except the Russian or Austrian ducat, which is in common use, there is little foreign coin now current.

Races.—Population.—The ancient Persian stock has been much intermixed in the course of ages by the settlement of other races in the country, especially by the influx of Greeks during and after the conquest of Alexander the Great; and more recently by that of Arabs and Turks. Still, however, the distinguishing characteristics of the family appear to be pretty well preserved. The complexion is fair but not transparent, and there is little or no colour in the cheek. Hair long, straight, and almost always jet-black; beard abundant, bushy, generally black, but now and then with a reddish tinge. Features regular and handsome, though generally minute, and, excepting the beard, rather effeminate. Stature little short of the European standard; body gracefully, but not very strongly formed, being, altogether, less robust than that of the European. Though early civilised, they have made no considerable progress in arts, science, or arms; and though remarkably clever, and not deficient in bravery, they have never been able to establish any thing like a free system of government, or to set any limits to the caprice and tyranny of their rulers. They have occasionally gained some advantages over other Asiatic nations, but they have never been able to oppose any effectual resistance to Europeans. In antiquity a small army of Greeks overthrew the Persian empire when in the zenith of its power; and, in more modern times, it has been overrun by the Arabs, and even the Affghans. At present it owes its existence to no intrinsic vigour of its own, but merely to the forbearance and jealousies of its enemies. The Persians have, in fact, contributed nothing to the improvement or civilisation of mankind; and, excepting Zoroaster, have not produced a single benefactor of his species known to history.

At present the pop. of Persia may be divided into two distinct classes, the fixed and the nomadic. The first comprise all who live in towns and villages, and have fixed habitations; the second consists of the various tribes, indigenous and of foreign extraction, who lead a pastoral and erratic life, having no regular habitations. But the whole body of the people may more conveniently be divided into four classes: first, those who are attached to the metropolitan and provincial courts, including the functionaries of government and military; second, inhab. of towns, comprising merchants, shopkeepers, artisans, with men of the religious orders, of business, or of learning; third, those employed in agriculture; and fourth, the tribes, including the *Eelleats*, or *Illyats* (dwellers in tents), or nomades.

The officers of court are more remarkable for skill in business, versatility, politeness and courtesy, than for probity, honesty, or good principles. Forced, in self-defence, to dissemble and control their feelings, they do so successfully, and, looking to wealth as the best means of purchasing favour in the day of adversity, as well as of enjoyment in prosperity, they stick at no means by which it may be acquired. Accordingly, they become, in general, great intriguers; and are at once deceitful, sensual, venal, treacherous, and, when they dare, arrogant and overbearing. Ministers of state are generally selected from among the men of business or meezas, who, though less arrogant than the nobles, are equally corrupt and immoral: they do not assume so much state as military chiefs, and are distinguished by a roll of paper stuck in their girdle, instead of a sword or dagger. One remarkable class of court dependants are the royal gholaums, or body-guards, the confidential and devoted guardians of the monarch's person; whence the name *gholaum*, or slave. They are usually either Georgian captives or sons of respectable families; and resemble somewhat the *mousquetaires* of the old French government. They are employed in lucrative and confidential services, and the situation is much sought after; but their tyranny and dissoluteness know no limits, and the arrival of a gholaum-e-shah in a district creates a sensation not unlike the attack of a pestilence.

The townspeople, *sheherees*, as they are called, are a mingled race of all those which have ever conquered or had intercourse with Persia, grafted on the original stock—Turks, Tartars, Arabs, Armenians, Georgians. They are a more industrious and less depraved class than the first; but being nurtured in falsehood and deceit, they are adepts in these vices, being at the same time, however, cheerful, polite, sociable, kind masters, and good servants. The merchants are numerous and often wealthy, and, having more intercourse with foreign nations, are usually of more cultivated and enlarged minds than others of their countrymen. The shopkeepers are, of course, a grade lower.

The ecclesiastical body, which is also numerous, is, with some rare exceptions, more remarkable for hypocrisy and profligacy than for piety and morality; originating, most probably, in the want of a suitable provision to live on, and the

Digitized by Google

consequent necessity of practising fraud and imposition.

The cultivators of the soil are those on whom the tyranny of their rulers falls most heavily, yet it cannot be said that they exhibit much misery. They are themselves, as well as their wives and children, for the most part sufficiently, though poorly, clad, and have abundance of wholesome, though coarse, food, as wheat or barley bread, cheese, sour milk, rice, &c. Extortion and tyranny are met, as usual, by cunning and deceit, and as the peasantry are active and intelligent, they contrive to avoid being completely fleeced.

The fourth class is an interesting and extensive one. It consists not only of the native nomades of Persia, who occupied the south-western and southern ranges of mountains long before the Mohammedan conquest, but of all those of nomadic origin who came with the various conquerors that have overrun the country since that era, as the Arabs, Ghiznavedes, Seljook Toorkmans, Moguls, Toorks, and Uzbecks. But the greater number consists of those of Arab and Turkish origin, particularly the latter. It may be remarked, as a singular anomaly, that these nomadic tribes supply not only the principal military force of the country, but, as a consequence, probably, its only hereditary aristocracy, and, generally, its sovereign himself. Of these tribes, a portion is always approximating more nearly to the habits of fixed life; but the greater part by far are strictly nomadic, living in tents, which they shift from place to place, according as lack of pasture for their flocks and herds, or change of season, suggests. In these their wealth consists; and though many of them cultivate a little grain, they live by the sale of the surplus of their stock, and by their produce in milk, wool, and flesh. Their character and habits are everywhere much the same. Being poor, they are frugal and abstemious; and, unaccustomed to more civilised manners, they are rude and blunt, fond of independence, and passionately fond of martial exercises, of the chase and war. They are predatory both from inclination and education; but hospitable, and comparatively honest when their faith is pledged, and brave. Their chiefs, seen among their own people and in their own country, appear to great advantage, as frank, liberal, and generous, though hasty and passionate; at court they are constrained to assume somewhat of the manners of the place, and do not shine so much as at home.

The Koords come under the denomination of the 'tribes,' though less erratic in their habits. They claim a high descent; some pretending to be the descendants of the genii of the air by terrestrial women, and others the progeny of certain persons saved from the tyranny of Zohauk. But their antiquity is unquestionable, and, probably, they may be descendants of the Carduchii described by Xenophon.

The Toorkman tribes, inhabiting the desert on the N. of Khorasan, are likewise to be reckoned among the Eelleats of Persia. They are wholly addicted to robbery and pillage, their chief occupation being that of making plundering parties, which destroy whole villages, carry off the inhabs. into slavery, and their cattle and property. But to enumerate, far more to describe, the various nomades of Persia would greatly surpass our limits; and we must refer our readers, on this interesting subject, to works where it is treated of at a greater length.

National Character.—In general it may be said of the Persians, that they 'are handsome, active, and robust, of lively imagination, quick apprehension, and agreeable and prepossessing manners. As a nation they may be termed brave; though the valour they have displayed, like that of every other people in a similar state of society, has, in a great degree, depended on the character of their leaders and the nature of the objects for which they have fought.' (Malcolm's Hist. of Persia, ii. 638.) Unhappily, however, their vices are far more prominent than their virtues. Though the despotism to which they are subject be similar to that which weighs down all the Eastern nations, they have a peculiar and distinctive character. As compared with the Turks, they are not unlike what the Irish are as compared with the English or the Scotch, being gayer, livelier, more active, more versatile, and less to be depended on. Though easily inflamed into passion, and, when under its influence, abusive in the highest degree, they are, speaking generally, courteous, affable, and polite. They flatter with equal skill and profusion of compliments. Their language is extravagantly hyperbolical; and a stranger, ignorant of their character, would suppose them ready to devote their fortune and life to his service. A foreigner, therefore, on his first arrival, can hardly avoid receiving the most favourable impression of their friendly disposition. A longer acquaintance, however, proves that their flattery is nothing to their insincerity. However it may be accounted for, whether it be ascribed to the despotic nature of their government and the frequency of revolutions, the influence of their religion, or whatever cause, all travellers are agreed that the Persians have reduced dissimulation and falsehood to a system, and have practised them so long and so universally, that it would be difficult for them, even if they intended it, to speak the truth. Their whole conduct is a tissue of fraud and artifice; and they rarely think of fair dealing till they find they have to do with one who sees through their impostures. 'There is no deceit, degradation, or crime to which they will not stoop for gain; and their habits of falsehood are so inveterate, that untruths flow, as it were, spontaneously from their tongue, even without any apparent motive.' (Fraser's Khorasan, p. 174.) Mr. Kinneir's estimate of their character is, if possible, still more unfavourable. 'They are,' says he, 'haughty to their inferiors, obsequious to their superiors, cruel, vindictive, treacherous and avaricious, without faith, friendship, gratitude, or honour.' (Memoir, p. 22.) Presents, a necessary instrument of business over all the East, are expected in Persia with peculiar avidity. Without presents no inferior can approach a superior, or any individual ask a favour from another; and the donation, being supposed to confer honour, is made in the most public place and manner possible. They are said to be, with few exceptions, incorrigible spendthrifts: their dress, horses, and harems are generally arranged on a scale exceeding their means, and intended for ostentation; and the difficulties in which they are thus involved make them resort to any expedient, however mean and discreditable for raising money.

These statements must, however, be understood as applying more particularly to the sedentary pop., and especially to the inhabs. of cities and towns. 'The *Eelleats* have the virtues and vices of their condition; are sincere, hospitable, and brave; but rude, violent, and rapacious. They are not in need of falsehood and deceit, and, therefore, not much in the habit of practising them; but, if they have fewer vices than the citizens of Persia, it is evidently the absence of temptation, and the ignorance of luxury and refinement, which give them all the superiority

Digitized by Google

they boast; for it is remarked that they never settle in towns, or enter them as visitors, without exceeding the inhabs. in every species of profligacy.' (Malcolm.)

'The natives of Persia do not recline on cushions, in the luxurious manner of the Turks; but sit in an erect posture on thick felt, called a *numud*. They have seldom, if ever, fires in their apartments, even in the coldest season, and, in order to be warm, fold themselves in a fur pelisse on a *barounee*, which is a handsome robe of crimson cloth, lined with shawls or velvet. Like other Oriental nations, they rise with the sun; and having dressed and said their prayers, take a cup of coffee, or, perhaps, some fruit. They then enter upon the business of the day, if they have any; and, if not, smoke and converse until about 11 o'clock, at which time they usually have their breakfast, and then retire into the *harem*. Here they remain until about 3 o'clock, when they return to the hall, see company, and finish their business; for with these people the most important affairs are discussed and transacted in public. Between 9 and 10, the dinner, or principal meal, is served up. This chiefly consists of *pillaws*, and of mutton and fowl, dressed in various ways; of which, however, they eat but moderately. Wine they never taste before company; although, in private, they are the most notorious drunkards, and invariably drink before they eat. They are passionately fond of tobacco, which they smoke almost incessantly from the moment they rise until it is time for them to retire to rest: it constitutes, indeed, the principal source of amusement to a man of fortune; and were it not for his *calcan*, I am at a loss to imagine how he would spend his time. In this respect, indeed, there seems to be something peculiarly inconsistent in the character of the Persian. When without an inducement to exertion, he resigns himself entirely to luxury and ease; and the same person who, with his *calcan* in his mouth, would appear to pass the day in a state of stupor, when roused into action, and mounted on his horse, will ride for days and nights without intermission. Hunting and hawking, as well as various gymnastic exercises, are favourite amusements of the Persians. By these means their bodies become hardened and active; and as they are taught to ride from their youth, they manage their horses with great boldness and address. They frequently use the "warm bath," but seldom change their linen.' (Kinneir's Persian Empire, 245.)

The Persian females, at least those of the sedentary part of the pop., are for the most part closely concealed. The wives of the great pass their time in visiting their friends, and amusing themselves with diversions of one kind and another, and with intrigues. The bath is, however, the principal scene of their enjoyment and relaxation, where, secure from interruption, they give full scope to merriment and scandal. They differ equally from us in their notions of beauty and of taste. Large, soft, and languishing black eyes constitute, in their opinion, the perfection of beauty. But they disfigure their natural charms by painting their faces, and sometimes also by tattooing their skins of various colours, while constant smoking spoils their teeth and mouths. Many of the women of Shiraz and other cities are as fair as those of Europe; but they want, owing to their confinement, the bloom so essential, in our estimation, to female loveliness. The Persian ladies would seem to be totally devoid of delicacy and refinement. 'Their language,' says Mr. Scott Waring, 'is often gross and disgusting, nor do they feel more hesitation in expressing themselves before men than they would before their female associates. Their terms of abuse and reproach are indelicate to the utmost degree. I will not disgust the reader by noticing any of them; but I may safely avow, that it is not possible for language to express, or the imagination to conceive, more indecent or grosser images. When they leave the house, they put on a cloak which descends from their head to their feet, and their faces are carefully veiled, holes only being left for the eyes. It is curious to see a number of tall and elegantly formed figures walking in the streets, and presenting nothing to your view but a pair of sparkling black eyes, which seem to enjoy the curiosity they excite. The veil appears to be essential to their virtue; for so long as they conceal their face, they care not how much they expose the rest of their person.' Like the Mohammedans, the Persians are restricted to four legitimate wives, but they may have as many concubines as they please, the latter being acquired by purchase or hire. Few, however, unless they belong to the richer classes, indulge in the luxury of a plurality of wives, or keep concubines. Marriages are usually celebrated with great splendour, and often entail a ruinous expense on the parties.

There are no existing data on which to found anything like an accurate estimate of the amount of the population. Pinkerton supposed it might amount to about 10 millions, which Sir John Malcolm thinks may be a pretty close approximation to the truth. Another writer (Fraser) has set down the fixed population at about 7 millions, and the migratory population at from two to three millions, thus approaching to Pinkerton's estimate. But besides the loss of territory which Persia has since suffered from her wars with Russia, a great depopulation has taken place within the last ten years, from plague, famine, and various prevailing maladies; and there is reason, besides, to believe that this estimate of the migratory pop. was much beyond the mark, so that it is probable the pop. of the countries subject to the shah does not exceed 8, and is certainly under 10 millions.

Government.—The government of Persia, like that of most Eastern countries, is, in principle at least, an absolute despotism. The shah is regarded as the vicegerent of the Prophet, and, as such, is entitled to implicit obedience. His word is law; he is absolute master of the lives and properties of his subjects; and the first man in the empire may, at his command, be instantly stripped of all his dignities, bastinadoed, or strangled, the only control on his actions being the risk of provoking rebellion or assassination. The two principal ministers are the grand vizier, or *Vizier Azem*, and the lord high-treasurer, or *Ameen a Doulah*. The former superintends every thing connected with foreign relations, and, in the absence of the sovereign, commands the armies; while the latter, who is subordinate to the other, superintends the internal arrangements, and the collection of the revenue. The whole executive government is in the hands of these two functionaries, whose authority, so long as they continue in power, is as absolute as that of their master; but their greatness, being built on the favour of a tyrant, is of the most unstable kind, and they are very often precipitated from their slippery elevation.

The duties of a monarch, who either regards his own safety or the well-being of his people, are numerous and weighty. One of the most important is the distribution of justice. The Mohammedan law, both civil and criminal, is

Digitized by Google

founded on the precepts of the Koran and the oral commentaries and sayings of the Prophet's immediate successors. This is called the *Sherrah*, or written law, and is the rule in all regular courts, where persons of the ecclesiastical order, such as Mooshteheds, preside. But there is also the *Urf*, or customary law, administered by secular magistrates, having the king as their head. It is more arbitrary, and the judgments of the king and his lieutenants are more summary, than those of the other court, and enforced with greater vigour. But there is an appeal to the superior functionaries, and the power of life and death rests with his majesty, who seldom delegates it, except to princes of the blood royal, or to governors of remote provinces. Theft is always punished with extreme severity.

The system of civil government is simple. Each province, or important district of a province, including some large city, has a *Beglerbeg*, or governor, usually a prince of the blood or nobleman of rank, who appoints his lieutenants, or *Hakims*, over the districts and subdivisions; and each village has its *Ketkhodah*, or magistrate, generally one of the elders or more respectable inhabitants, who is the organ by which communication is kept up with government. There are also governors of cities and towns, *Daroghas*, or lieutenants of police, and *Kelorenters*, or chief magistrates of cities, in which each *muhuleh*, or parish, has its ketkhodah, or head, who are in general practically chosen by the people, and who look to the kelounlee as their head.

The beglerbegs, like the Turkish pachas, are, at the expiration of a certain period, cited to court, where, admitting their conduct to have been ever so irreproachable, persons are not wanting to accuse them of injustice and mal-administration; and unless the demands and avarice of the court be completely gratified, their eyes are put out, and their property confiscated. Conscious, therefore, of the necessity of amassing a sufficient sum of money to answer the rapacity of the king and his ministers, and aware, at the same time, that, provided the money be forthcoming, no inquiry will be made respecting the manner in which it has been acquired, the same mode is applied by the beglerbegs to the hakims and other subordinate authorities; who, in turn, oppress the heads of villages and the cultivators, so that the land becomes the prey of a subordination of vultures, and venality and extortion pervade every class from the throne to the cottage. (Kinneir's Memoir, p. 31.) But the principal evil under which the country labours consists in the perpetual insurrections and the sudden changes of sovereigns and dynasties. The insecurity, devastation, and proscriptions, to which this state of things has led, have necessarily gone far to extinguish all industry, and many provinces that were formerly well peopled and well cultivated are now all but deserts. It has, also, prevented any idea of stability being associated with the existing state of things; and has made change, and the insecurity and falsehood inseparable from it, almost a necessary state of existence.

The revenue of the shah has been variously estimated, but does not probably amount to more than 1,500,000*l.* or 2,000,000*l.* As already stated, it is principally derived from taxes on land and farms, capitation taxes, duties on imports and exports, and tributes paid by the nomadic tribes.

Religion.—The Persians are Mohammedans of the sect called Schiites, or Sheahs, or of those who look upon Ali, the son-in-law of the Prophet, as his legitimate successor. They repudiate the first three caliphs, Abubekr, Omar, and Othman, and their successors, as usurpers of the right of their patron Ali, holding that of his sons Hassan and Hossein to the caliphat as indefeasible, and acknowledging their 12 immediate descendants as the 12 high priests, or imâms, of their religion; the last of whom, Imaum Mehdee, they consider as still alive, though (*ghaib*) concealed for a time, so that no other can exercise the office. This doctrine is quite opposed to that of the Turks, who belong to the sect of Sunnites, and between whom and the Persians the most rancorous and irreconcilable animosity exists as to religious doctrines.

The priesthood consists of many orders, of which the Mooshtehed is now the chief. There are seldom above four or five of this dignity, and these are elected as much by the public voice as by that of their brother mooshteheds, by whom they must be declared, for the shah has no voice in their appointment. The Sheikh-ul-Islam, or ruler of the faith, is next in rank, but he receives his appointment and a salary from the shah, and there is one in all large towns. In every mosque of consequence, and at every considerable shrine or place of pilgrimage, there are at least three regular ecclesiastical officers: the Mooturelle, who manages its temporal affairs; the Muezzin, or cregee to prayers; and the Mollah, who conducts the ceremonial. If the establishment be rich, there are several mollahs, from among whom are selected a *peesh numáz*, who recites the prayers and goes through the motions and genuflexions to guide the congregation. They also preach occasionally sermons from texts of the Koran. Of all these, except the Sheikh-ul-Islam, the income and means of life depend chiefly on the celebrity of the individual for wisdom, virtue, and religious sanctity; so that there are no means of estimating the income of individuals: but most mosques and shrines have large property in land and villages, the gift of the crown or of pious individuals, and out of this the priesthood attached respectively to each is maintained. Besides those above enumerated, there are in every city, and in every seminary of learning, a crowd of mollahs who live by their wits, waiting for the chance of employment, but having little of the priest but the name. They practise astrology, write letters and contracts for those who cannot do it for themselves, and descend to all manner of meanness and vice for a livelihood.

The Persians, though there are many enthusiasts and bigots amongst them, are not generally intolerant: they listen without anger to the professions or arguments of those who hold a different belief, and do not allow this circumstance to cause any interruption of social intercourse. The only exception is in the case of the Guebres, or fire worshippers, who are probably rendered odious to the modern rulers of Persia by connecting with their faith an attachment to its ancient laws and political system. This unfortunate race is now almost entirely extirpated, only a small remnant being found in Yezd, and other cities of Kerman. Indifference, scepticism, and free-thinking are, however, making a rapid progress. This last, which may be identified with what is called Sooffeeism, extends every day. There is, if we may so speak, a religious and a sceptical Sooffeeism; the former is a sort of a mystical or fanatical aspiration after the mysteries of divine love, but without laying any or much stress on the rules and regulations of the Koran; the latter is of a bolder character, and approaches nearer to the European notions of free-thinking: its votaries affect no particular respect for religion, but are a species of metaphysical deists, regarding the Koran merely as an elegant

Digitized by Google

work, embodying sound moral doctrines, but not otherwise entitled to attention. Hence all who profess or are suspected of Sooffeeism are hated or persecuted by the mollahs. But Mohammedanism in Persia, as in other countries in which it is professed, appears decidedly on the decline, and Sooffeeism is likely to be one great instrument of its overthrow.

The ancient religion of the Persians, which is not yet entirely extirpated, was materially reformed and renovated by the famous legislator Zoroaster, or Zerdusht. The life, and even the epoch of the birth, of this great reformer are involved in the utmost obscurity; but the preferable opinion seems to be that he flourished about the 6th century B.C. He inculcated the doctrine of an eternal, self-existing, supreme Being, from whom every thing else has its origin; and from whom are sprung two antagonist powers, Ormusd, the source of all good, and Ahriman, the source of all evil; of which, however, the former, though this point be extremely obscure, is destined, in the end, to obtain the ascendancy. The doctrines of original sin, the immortality of the soul, the happiness of the good and the misery of the bad in another life, are all laid down by Zoroaster. But the distinctive feature in the religion of the Persian sage is the extreme veneration paid to fire, light, and heat, which he regarded as symbolical of the Divinity. '*C'est par lui que tout respire: la terre lui doit sa fécondité; l'animal, son existence; l'arbre, sa végétation. Non seulement il anime les êtres, il forme encore leurs rapports, et son action, par conséquent, n'est pas moins ancienne que le monde.*' (Pastoret, Zoroaster and Confucius, p. 30.) Herodotus says, that the ancient Persians neither erected temples nor statues to their gods, but sacrificed to them on the tops of mountains, or other high places. (Herod., lib. i. cap. 131.) They had, also, the singular, and, as it appears to us, barbarous custom of exposing the bodies of the dead to be devoured by birds (Herod., lib. i. cap. 140); and Niebuhr distinctly states that this custom was observed in his time by the Parsees at Bombay. (Voyage en Arabie, ii. 39.) The magi, or priests, established by the Persians, had great influence. The 'Zend Avesta,' the most important work on the religion of the Parsees, was translated and published in 3 vols. 4to. by Anquetil du Perron in 1771; but it is believed by some of the ablest critics, that the most ancient portion of this work is long posterior to the age of Zoroaster.

Education.—In former reigns, particularly in the time of the Sufiaveans, when literature was more encouraged than now, considerable attention was paid to education. Medressas or colleges were built and endowed, in which mollahs and teachers of suitable abilities were placed to instruct the students. These buildings consisted of a quadrangle, the interior sides of which were pierced with small cell-like apartments, like those of a caravanserai, in each of which a student lived. But these institutions were rather for students of more advanced age: for younger pupils of the lower classes there are schools kept by private persons, where reading and writing are taught, and some knowledge of the practice of religion is imparted, with perhaps, to some who are destined to become 'men of the pen,' a little superficial instruction in logic and grammar. The children of the higher orders are taught at home by *maalims* and *lallahs*, or tutors, who, after the elements of Arabic and Persian are acquired, instruct their pupils in the duties of their religion, and teach them to read the Koran, with such works as are calculated to impress them with a strong regard for Sunnite doctrines. Next come the works of Saadi and Hafiz, with a superficial course of grammar, logic, and philosophy. All this time athletic exercises, riding, hunting, and the use of arms, are not neglected; and from the earliest age every boy is carefully schooled in all that regards the ceremonial of social intercourse. He is taught how to sit down and rise up, and to stand in the presence of his elders or superiors; and so much stress is laid on these matters, that it is most uncommon to observe the least deviation from due etiquette even in children of 5 or 6 years of age. But the whole system is artificial, more showy than solid, and tends in no small degree to nurse up the rising generations in that disposition to deception and hypocrisy which marks so strongly the national character.

Military Force and Resources.—'Frugal in his diet, robust in his constitution, capable of enduring astonishing fatigue, and inured, from his infancy, to the extremes of heat and cold, to hunger and thirst, nature seems to have formed the Persian for a soldier. But as, according to the ancient customs of this people, it is deemed degrading to a person, who has money sufficient to purchase a horse, to travel on foot, the infantry of Persia has been, from the earliest ages, contemptible; whilst her numerous bodies of irregular cavalry have more than once carried terror and defeat amidst the disciplined legions of Rome.' (Kinneir's Memoir.) Her forces, however, both cavalry and foot, have varied in amount and efficiency with the varying abilities and martial skill and daring of the different monarchs. Until lately that attempts have been made to form regular corps, disciplined after the European fashion, the army has mostly consisted of levies of irregular cavalry, furnished by the chiefs of the different wandering tribes, according to their presumed numbers and strength, and also by the different cities and towns, on a plan corresponding in many respects with the feudal levies of the middle ages in European countries. The troops thus collected, though brave, are totally deficient in organisation and discipline, and could make no serious impression on a body of European troops. Inasmuch, too, as the arms and horses on which the horsemen are mounted do not belong to the state, but to the individuals, and frequently constitute their whole property, they are very apt to prefer their safety to other considerations; a circumstance which, on more than one occasion, has proved fatal to the reputation of the Persian army. The whole force that might thus be collected on an emergency might, perhaps, amount to 100,000 or 150,000 men. In the late reign, the first attempt was made to introduce European discipline and tactics among the Persian soldiers. The prince royal, Abbas Mirza, obtained leave from his father and officers from the E. I. Company to raise and discipline a body of troops in Azerbijan, with a view of opposing the Russians, and strengthening his internal government; and he did form a corps amounting, with cavalry and artillery, to about 12,000 men. Of these the horse artillery were particularly good and efficient; but after the peace of Goolistan with Russia, the men composing this corps were unwisely permitted to return to their homes, mustering only occasionally, the officers remaining useless appendages of state at the court of the prince. On the commencement of the war with Turkey in 1822, as British officers could not serve against a power on friendly terms with Great Britain, they were dismissed; but the army of 35,000 men, regular and irregular, with which the prince marched against the Turks, was victorious, until dispersed by the cholera; and from that

Digitized by Google

time, until 1833-34, there were only one or two British officers retained to drill and to command the serbâz or regular troops, which were still maintained in Azerbijan. When the prince royal, however, proposed to subdue the rebellious chiefs of Khorasan, and to reduce some of the other more remote provinces to order, he felt the want of more efficient aid to reorganise his military force, and applied to the British government of India for a supply of commissioned and non-commissioned officers, who only reached Persia after his death, in 1833.

In the disastrous campaigns in Khorasan, and particularly against Herât, the army suffered much from sickness, casualties, and desertion; so that no calculation can be made of its actual state. In 1837, however, when the shah made every possible effort to bring a large force against Herât, the besieging army did not certainly exceed 35,000 men of every description. The falling-off in the amount of the army from the Russian war of 1827–28, was very striking; for the prince royal had then a well-appointed army of 40,000 men, with all its complement of baggage, cattle, and attendants on the frontiers; while the shah was at Choee with another army of 50,000. It may be doubted, however, whether the attempts to introduce European tactics and discipline into such a country, and under such a government as that of Persia, can ever succeed; and whether it would not have been better policy to trust now, as of old, mainly to levies of cavalry, and endeavouring to improve and amend the defects in their constitution and discipline. What may be called the household troops of Persia, consist of a kind of militia of about 10,000, quartered in the capital and its vicinity, and liable to be called out at a moment's warning. The *gholaums*, royal slaves, or body-guard, have been already noticed.

Arts, Language, Sciences, and Literature.—Of Persian proficiency in these, previously to the Mohammedan conquest, little or nothing is known, all that may have existed having been destroyed by the Moslems. But we may infer, from the relics of sculpture of the Sassanian era that remain, and from accounts of contemporary authors of other countries, that some of the arts, at least, were then successfully cultivated. In the days of the Suffaveans, painting appears to have received some attention, and architecture still more; but though attempts at depicting the human form, as well as animals and landscapes, are numerous among the Persians of this day, they are but rude and unsuccessful, the total absence of all drawing and perspective rendering their performances ludicrous, if not disgusting. In fact, being quite without models for either painting or sculpture to copy from, excellence is scarcely to be looked for, especially in a country where the tyrannical spirit of the government and nobility would render such attainments dangerous rather than profitable to the owner. Their most successful performances are the inkstands and small boxes, made chiefly at Shiraz and Ispahan, which are ornamented with figures of boys and girls, birds and flowers, finished with surprising minuteness and accuracy. The stone and seal cutters of the same cities are also famous for their workmanship.

When the Arabs overran Persia, about the middle of the 7th century, three languages were spoken in the country, the Parsee, Pehlvi, and Deri, exclusive of the Zend, or language dedicated to religion. The first of these languages has superseded the rest, which are now only known by name, and become the universal language of the country. It is of simple structure; and, like the English or French, has few or no inflections, prepositions governing its cases, and auxiliary verbs its tenses and modes. Many of its roots can be readily traced to the Sanscrit; and, in the course of time, it has received a large accession of Arabic words. All the existing literature of the Persians dates from the Arabic conquest, and, mostly, indeed, belongs to the 15th and 16th centuries.

In science the Persians are scarcely more advanced than in art. Astronomy, judicial astrology, metaphysics, logic, mathematics, and physic are among those professedly cultivated. But their efforts in the first are contemptible; their theories, founded on the Ptolemaic system mixed up with fantastic notions of their own, are utterly useless, unless to aid their dreams of astrology. Their firm belief in this science is universal, and no Persian will undertake the most trivial affair without consulting some professor of its mysteries for a lucky hour. Their metaphysics and logic are scarcely less puerile. The first consists of little more than a collection of disputations, sophisms turning on wild and unprofitable paradoxes; the second is an ingenious method of playing upon words, the object being not so much to arrive at truth, as to display quickness of mind and readiness of reply, in the discussion of plausible hypotheses. Geography is no better understood. Their knowledge of countries, and their relative positions, is extremely confused; nor can they describe, with any exactness, even those places or regions with which they are most familiar.

Mathematics, though not much more beneficially applied, are taught upon better principles, for the Persians are acquainted with the works of Euclid. Chemistry is unknown; but alchemy is a favourite study, and the search after the philosopher's stone continues to be eagerly prosecuted. In medicine, though they profess themselves pupils of Galen and Hippocrates (*Jalenoos and Bocrat*), they practise only the most wretched empiricism, united with the exhibition of a few simples, the qualities of which experience has taught them. Diseases are classed into hot and cold, moist and dry, upon no apparent principle, and each disease is combated by a remedy supposed, as vaguely, to be of an opposite quality. They are quite ignorant of anatomy, and even of the circulation of the blood, so that their knowledge of surgery is no greater than that of medicine. Yet though they admire the skill of Europeans, and eagerly possess themselves of their remedies, they adhere obstinately to their own practice; and all the persuasion of the British mission, and its medical men, were for ten years exerted in vain to introduce vaccination, although the ravages of the smallpox were frequently dreadful. The profits of science are confined to those who are regarded as proficients in divinity, astrology, and physic. The two former, when combined, thrive best.

The Persians make high, and, in some respects, not ill-founded, pretensions to literature. Their treatises on the sciences now mentioned are in a great measure borrowed from the Arabians, and little improvement has been made of late in these branches. Their historical works are of a higher cast, and include some of considerable merit; but these belong chiefly to the earlier and brighter times of the empire. Among the more modern may be noticed a history of Nadir Shah, a flowery but authentic record of the life of that extraordinary monarch. But it is in poetry the Persians claim peculiar excellence; and they, no doubt, can produce the names of more eminent authors in this department than any nation of the East. From the highest to the lowest, they possess an

Digitized by Google

exquisite relish for poetical compositions: from the men of letters to the lowest groom they recite passages from their heroic poets, or chant odes of Hafiz; and if one should find fault with a tent pitcher, the other probably replies with a stanza from Rudiki, or a moral apothegm from Saadi. It is singular, however, that the moral lessons inculcated by their poets, and learned and, as it should seem, admired by the people, should be wholly inoperative in practice, the Persians being certainly as corrupt, sensual, and immoral as any people of Asia.

Their poetry may be divided into epic and narrative, moral and lyric. Of the first class Ferdousi is the father, though Dukeekee did compose about 1,000 verses of the Shahnameh, in which the former is also said to have been assisted by Asidi. Next to Ferdousi ranks Nizâmi, who composed a poetic life of Alexander the Great; but this, like the Yusseeff and Zuleika of Jâmi, another on the same subject by Ferdousi, the Leila and Mignoon of Hatifie; Khoosroo, Shireeu, and others, recited with rapture all over Persia, are, in fact, poetic romances, called Musnavees.

Of the didactic poets the chief, without question, is Saadi, whose Goolistân and Bostâm abound in beautiful maxims and fine moral precepts. Sheikh Saadi was born at Sheraz (A.D. 1194), and in his youth was a great traveller. While in Syria he was taken by the Crusaders, and actually compelled to labour as a slave at the fortifications of Tripoli. From this condition he was relieved by a merchant of Aleppo, who not only paid ten crowns for his ransom, but gave him his daughter with 100 crowns for her dowry. The lady, however, proved a shrew, and Saadi, in several parts of his works, gives vent to the chagrin caused by this marriage. Among other taunts she is said to have reproached him with having been bought from the Christians by her father for ten crowns: 'Yes,' replied the unhappy moralist with a sigh, 'and he sold me to you for a hundred.' He died in his native city at the extreme age of 120 lunar, or 116 solar years; and his tomb is still to be seen near the place of his birth—a small mosque-like edifice, within an enclosure, in which are some fine old fir trees and some cypresses.

In the mystic and lyrical strain there is none who can come into competition with Hafiz, to whom also Shiraz had the honour of giving birth. He flourished in the time of Tamerlane or Timour Bec, who, when he came after the defeat of Shah Mansora to the place where the poet dwelt, desired to see and converse with him. With feigned or real displeasure, the conqueror demanded to know how he dared to dispose of his two noble cities of Samarcand and Bokhara, which, in a beautiful stanza, he declared he would give for a mole on the cheek of his mistress: 'Can the gifts of Hafiz ever impoverish Timour?' was the reply, which changed the monarch's wrath into admiration, and elicited reward instead of punishment. The poetry of Hafiz is considered by Persian scholars as of a singularly original character—simple and unaffected, yet possessing a wild and peculiar sublimity. Like most lyrical effusions, his odes will not brook translation, so that his beauties can never be comprehended by the mere English reader. In his own country, however, he is fully appreciated; and perhaps no poet of any country ever attained greater popularity among those for whom he wrote than the khanjeh of Shiraz. His mortal remains rest near the city whose praises he has celebrated, not far from the tomb of Saadi, and near his favourite stream of Rôknabad. The tomb is in a small enclosure, whither the people of the place resort to sit under the shade of the old cypresses, recite the odes of their favourite bard, and draw omens from the pages of his works.

Next to Hafiz, in celebrity, has been placed Abdul Rahman Janie, a famous doctor of laws, and no less famous sooffee, whose *Diwân*, or collection of odes, is in high estimation with the enthusiasts of his sect. His wit is said to have been equal to his poetic genius.

To these already mentioned might be added many names scarcely less celebrated, whose works it would require too much space to particularise or describe. But it is not to be imagined that their perusal would give any pleasure to European readers. They contain, it is true, many beautiful thoughts, and their diction is frequently euphonious and expressive; but they have the vice of most Eastern works, that is, of being disfigured by the wildest extravagance and bombast, and by an endless repetition of metaphors and similes.

History.—Modern Persia comprises the countries known in antiquity by the names of *Media*, *Susiana*, *Caramania*, *Hyrcania*, and Persia Proper. Its ancient history is intimately connected with that of Greece and Rome. In more modern times it has been the theatre of endless civil wars, revolutions, and changes devoid of all interest to foreigners. Towards the end of the 16th century, however, order was restored, and Persia rose to distinction under the government of Shah Abbas, surnamed the Great, who defeated the Turks in several battles, taking from them the city of Taurus and the province of Georgia, and Ormuz from the Portuguese. Abbas was succeeded by a series of imbecile tyrants; and, in 1727, the country was overrun by the Affghans. At length the famous Thamas Kouli Khan, a brigand chief, was raised to the throne by the title of Nadir Shah, and distinguished himself alike by his victories and his ferocity. Nadir being assassinated, in 1743, his death was followed by a long-continued civil war. After a vast deal of blood had been spilt, the eunuch Mehemet Khan succeeded, by his superior ability and good fortune, in establishing his authority over most of the provinces now comprised in Persia; and transmitted his authority to his nephew Futteh Ali Shah.

This prince waged an unsuccessful war with Russia, who stript him of a large territory in Armenia, and obliged him to pay 2,500,000*l.* as an indemnity for the expenses she had been put to in the contest. Futteh Ali kept an enormous harem; and it was his practice to disperse his sons over the empire, as governors of provinces and towns, of which, speaking generally, they were the scourges. On the death of Futteh, in 1835, his grandson, Mohammed, son of the prince royal, Abbas Mirza, succeeded to the throne in terms of his grandfather's will. A few of his uncles, who were reckoned most dangerous, were deprived of sight; but, on the whole, the succession was unusually tranquil and bloodless. His unsuccessful expedition against Herat is said to have been undertaken at the instigation of Russia. Shah Mohammed ruled from 1835 till 1848, and was succeeded, in the latter year, by his son Násiru'd din Shah, described by one of the most recent writers on Persia, Mr. Eastwick (Journal in Persia, London, 1864), as an intelligent prince, with a 'mild, good-humoured expression.'

PERSIAN GULF, an extensive arm of the Indian Ocean, separating Persia from Arabia, between the 24th and 30th degs. N. lat., and the 47th and 57th E. long., uniting with the Indian Ocean by the strait, about 32 m. across, between Cape Musseldom (lat. 26° 19′ N., long. 56° 30′ E.), and the opposite coast. This gulf has somewhat

Digitized by Google

of an oval shape, extending about 550 m. NW. and SE., with an average breadth of about 160 m.; but towards its SE. end it is upwards of 220 m. in width, though it soon afterwards, on taking its northern bend, previously to its junction with the ocean, becomes much narrower. It receives at its NW. end the united waters of the Euphrates and Tigris, about 70 m. below Bussorah; but it has few or no other affluents of any importance. These streams, however, assisted in some measure also by the shape of the gulf itself, tend to diminish the height of the tides, which is considerably less than in the Red Sea. (Traill's Phys. Geog., p. 116.) The climate round the shores of this gulf is extremely hot; and notwithstanding the prevalence of NW. winds, the thermometer in some parts stands at a higher elevation than in almost any other locality with which we are acquainted. Owing to the number of small islands, and the number and extent of its reefs, the navigation of this sea, especially along the coast of Arabia, is hazardous, difficult, and tedious: it is less encumbered along the Persian coast. The trade carried on in the ports, on or connected with the gulf, is very considerable. Bussorah is the principal inlet through which Indian and other Eastern products find their way into the Turkish empire; and Bushire, in the Persian territory, is the chief entrepôt of the trade between that country and Bombay, whence it receives the products of Europe, China, and the E. Archipelago. The chief interest, however, that attaches to the Persian Gulf is its pearl fishery, on which indeed the inhab. of the S. coast mainly depend, as the land produces only a few dates, and is insufficient to support the pop. (For details as to these fisheries, see the article BAHREIN ISLANDS; and see also BUSSORAH and BUSHIRE, in this Dict.) This sea was surveyed between 1821 and 1828; but, although much information has come to us through charts and memoirs in the Geog. Journal (vols. v. and viii.), we are far from possessing any satisfactory information respecting its islands, which are, in all probability, more numerous and important than has hitherto been supposed. The ancient importance of the Persian Gulf is principally owing to its connection with the conquests of Alexander and its commercial intercourse with India. Were the scheme for the steam navigation of the Euphrates to succeed, this sea might again become, as it was during a certain period of antiquity, a thoroughfare for the commerce between the E. and W. worlds; but the advantages in this respect enjoyed by the route by the Red Sea and through Egypt are so very superior, that we have no doubt it will continue to engross by far the larger portion of the trade not carried on by the Cape of Good Hope. The islands and shores of the Red Sea have been at all times a favourite resort of pirates. At present, however, they are, in consequence of the exertions of the British government, nearly extirpated.

PERTH, one of the largest and most important cos. of Scotland, nearly in the centre of that part of the U. Kingdom, but communicating by the Frith of Tay with the German Ocean, having N. the cos. of Inverness and Aberdeen, E. Forfar, S. Fife (from which it is mostly separated by the Frith of Tay), Kinross, Clackmannan, the Frith of Forth, and Stirling, and W. Dumbarton and Argyle. Exclusive of a small detached portion on the Frith of Forth, it is of a compact circular form. Area, 2,835 sq. m., or 1,814,063 acres, of which 32,000 are water. This great co. comprises within itself almost all that is peculiar to or characteristic of Scotland; having every variety of surface and soil, from rugged, sterile mountains, to low, level, fertile vales. Its lakes and rivers are also on a grand and varied scale; and its climate is as different as its surface, being severe in the more elevated, and mild and early in the lower districts. The contrast in the inhabs. is equally great: the Celt being found on the mountains and the Saxon on the plains, and each differing widely from the other in language, dress, and manners. Perth is naturally divided into highlands and lowlands: all the country, including the Ochill and Sidlaw hills, from its S. frontier to the foot of the Grampians, being included in the lowlands, and the remainder in the highlands. The part of the Grampian chain in this co. comprises some of the highest mountains in Scotland, among which may be specified, Ben Lawers, 3,945; Ben Marc, 3,911; Ben Gloc; 3,690; Schichallion, 3,550; Ben Achougie, 3,028; and Ben Ledi, 2,863 ft. above the level of the sea. Besides the mountains and hilly districts, there are very extensive, though progressively diminishing, tracts of moor, moss, and bog. There is, also, a large extent of natural wood and plantations. The latter were much extended by the operations of the late Duke of Atholl, who planted above 15,000 acres. But notwithstanding these deductions, the cultivated land is estimated at from 530,000 to 560,000 acres, or at about a third part of the entire surface. The most valuable tract of lowland is denominated the Carse of Gowrie, being the district bounded by the Tay on the S. and W., the Sidlaw hills on the N., and Forfarshire on the E. Its soil is mostly a deep rich clay loam; and, in point of fertility, it is not, perhaps, surpassed by any land in the kingdom. The lower part of Strathearn, from Forteviot to the confluence of the Earn and Tay, consists of a similar soil, and is hardly less fertile. Exclusive of these and the low lands along the Tay, above Perth, there are in the valleys of the Teith, Forth, and other rivers, extensive tracts of carse land, and of sandy, gravelly loam. Light gravelly soil is, indeed, predominant in Perthshire. There are some very large estates; but there is, also, a fair proportion of the smaller class of proprietors. Arable farms vary in size, from 50 to 500 acres. The same plan that formerly prevailed in Argyle of holding lands in common, prevailed throughout the highlands of Perthshire; but examples of it are, at present, rarer in the latter than in the former. Farms in the lower districts are universally let on lease, generally for nineteen years; large stock farms are also let on lease; but some of the small highland occupiers hold from year to year. Buildings and other accommodations of the farmers, in the lower districts, are for the most part substantial and excellent; but in some of the highland districts they are still, in many instances, bad and deficient. Wheat and beans, of excellent quality, are the prime articles of cultivation in the Carse of Gowrie, Strathearn, parts of Strathmore, and the valley of the Forth and Teith. In the midland districts, barley, and, in the higher, oats are the principal crops. Potatoes everywhere cultivated, largely consumed, and recently exported in large quantities to the London market. Turnip culture extensively prosecuted. Considerable quantities of fruit, as apples and pears, are produced in the vales, particularly in Gowrie. Breeds of cattle various, but none peculiar to the country; the stock differs with the varying quality of the land on which it is pastured. Number of sheep vastly increased within the last 40 years, and the Cheviot breed now generally diffused. The sheep husbandry is daily gaining ground, and the breed of cattle has been improved both in size and earliness of maturity. Roads signally improved; as much so, certainly, as in any other Scotch co. Coal is

Digitized by Google

found in the S. part of the co. contiguous to the Frith of Forth, and limestone and freestone are generally diffused.

The linen and cotton manufacture has been introduced, particularly into the city of Perth, but neither has had much success; so that, on the whole, Perthshire may be regarded as an essentially agricultural district: the progress of agriculture during the present century has been most satisfactory. Waste ground has been planted and brought into cultivation. The roads are in a superior condition, and new ones have been constructed. Farm steadings were formerly covered with thatch, and indifferent in building and accommodation; but they are now all slated, well built, and adapted for every necessary purpose. Wheat, potatoes, turnips, and artificial grasses are cultivated in a much greater breadth. More manure is laid on the soil, and it is ameliorated by fences, cleaning, and draining. Horses and harness, the different breeds of cattle and sheep, and all the implements of husbandry are much improved. Principal rivers, Tay, Forth, Earn, Teith, Lyon, Garry, and Tummel. Fisheries on the Tay about the most valuable in the kingdom. Perth is divided into 80 parishes, and returns 2 mems. to the H. of C., 1 for the co. and 1 for the city of Perth. Registered electors for the co., 3,447 in 1865. Some parishes in the SW. part of the co. are joined, for election purposes, with the cos. of Kinross and Clackmannan; and the bor. of Culross unites with that of Inverkeithing, Dunfermline, and others in returning 1 mem. to the H. of C. Principal towns, Perth, Crieff, and Dumblane. At the census of 1861, the co. had 22,035 inhabited houses, with 133,500 inhabitants; while, in 1841, Perthshire had 28,933 inhabited houses, and 137,390 inhabitants. The old valued rent was 28,330*l.*, and the new valuation for 1864–65 was 740,000*l.*

PERTH, a royal and parl. bor. and manufacturing town of Scotland, co. Perth, of which it is the cap., on a plain on the right bank of the Tay, 33 m. N. by W. Edinburgh, on the Scottish Central railway. Pop. 25,250 in 1861. The town is surrounded, except on the line of the Tay, with gently rising, verdant, or richly wooded hills. It is connected by a handsome bridge of 9 arches, 880 ft. in length (built by Smeaton in 1771, at an expense of 26,632*l.*), with the village of Bridgend, on the left bank of the Tay. The main street runs N. and S., nearly parallel to the river; and it and the other streets are for the most part straight, and connect with each other at right angles. Many of the more modern streets and crescents are of freestone, and altogether the town is remarkably neat, clean, and well-built, and has a substantial, wealthy appearance. The inhab. are well supplied with water, raised by a steam-engine from the river into a reservoir, whence it is conducted in pipes through the streets. North and south of the town are the two large public greens, called the North and South Inches, inc. about 170 acres. The former, which is flanked on the W. by Athole Crescent and Rose Terrace, has the race-course; the latter is surrounded by stately trees and elegant villas.

In addition to the gas and water-works, the public edifices are the co. buildings and gaol, of Grecian architecture, fronting the river, erected in 1819, at a cost of 32,000*l.*; the church of St. John, a building of very ancient but unascertained date, surmounted by a pyramidal spire of wood covered with lead, and divided into three places of worship, appropriated to three distinct parishes; St. Paul's church, built in 1807, at an expense of 7,000*l.*; the academy, also erected in 1807, at a cost of 6,000*l.*; lunatic asylum; the theatre; barracks; Marshall's monument (built in commemoration of a late lord provost), containing the public library and the museum of the Perth Antiquarian Society; the new city hall, 96 ft. by 68 ft., and the old town hall. A little way S. from the town, an extensive military prison, capable of accommodating 7,000 captives, was constructed, in 1812, at an expense of 130,000*l.*; but it has since been converted into the central and model prison for Scotland.

The town has several parochial and Free churches, in one of which the service is performed in Gaelic. There are also several United Presbyterian chapels, comprising the United Secession, the Original Seceders, and the Relief, now all merged in the same general body; with chapels belonging respectively to the Independents, Baptists, Methodists, Glassites, Scotch Episcopalians, and R. Catholics. Among the most conspicuous religious edifices is the new cathedral, called St. Ninians, in the decorated style of the 14th century. It is the principal ecclesiastical edifice of the Scotch Episcopal communion in Scotland.

The grammar school of Perth was at an early period the most celebrated in Scotland, being attended by pupils from every quarter of the kingdom. It was the first seminary in Scotland in which Hebrew was taught. (M'Crie's Life of Knox, ii. 14–16.) Its eminence may be said still to continue. The academy, which embraces the most ample course of instruction, scientific, literary, and commercial, was founded in 1760; its first rector, Dr. Robert Hamilton, afterwards of Aberdeen, is well known by his able work on 'The National Debt.' These 2 seminaries are endowed; and there are besides about 28 other schools, of which 6 are endowed; in addition to which a large seminary has been erected, partly by public subscription, and partly by a grant from government, for the education of 400 poor children. Perth has numerous public libraries, one of which contains 6,000 vols.; and a literary and antiquarian society. Printing and the publishing of literary works were at one time carried on here to a greater extent than in any town of a similar size in Scotland, perhaps in the empire. This branch has now, however, materially declined.

About 60 years ago, Perth had an extensive trade in gloves, those made here having a preference throughout the kingdom. Latterly, however, Dundee has quite superseded Perth in this department. In consequence, the business of tanning, which principally depended on the glove trade, has greatly declined. The manufactures consist at present principally of coloured cottons, especially for umbrellas. A great quantity of handkerchiefs, checked and striped ginghams, imitation India shawls, scarfs, and trimmings, are also woven. The aggregate number of weavers is about 1,600, some of whom are employed by Glasgow and Paisley houses. There are in the town several breweries, corn-mills, and iron-foundries. The salmon fisheries on the Tay, belonging to the city, bring a rent of 1,200*l.* per annum. The quantity of salmon, inc. grilses, shipped and sent by rail from Perth for London, amounts, at an average, to about 4,500 boxes, or 225 tons a year.

The Tay is navigable, at high water, to Perth for vessels drawing 14 ft. water; but the navigation was formerly much obstructed, and a great deal was required to be done for its improvement. In this view an act was obtained in 1834 for deepening the bed of the river, and forming a new harbour and wet dock, and the works have been executed with much advantage to the navigation. There belonged to the port on the 1st of January, 1864, 8 sailing vessels under and 49 above 50 tons

Digitized by Google

burthen, besides one steamer of 51 tons. The exports consist chiefly of manufactured goods, corn, salmon, and potatoes, large quantities of the latter being shipped for London. The gross amount of customs duty received was 15,582*l.* in 1863.

Perth is very ancient, and some authorities refer its origin to the Romans. It was a bor. at least as early as 1106. Its church being consecrated to John the Baptist, it was long called St. Johnstoun. Prior to the reign of James II., Perth was the capital of Scotland; and from its central situation it is, perhaps, to be regretted that it did not continue to enjoy that distinction. The kings were crowned at Scone, about 2 m. N. of the city, and had a residence in the town. The 'Parliament House' of Perth remained standing till 1818, when it was pulled down. Scone Palace, long a royal residence, has been rebuilt by its owner, Earl Mansfield, and is now a splendid modern mansion. The famous stone, reckoned the palladium of Scotland, on which the Scottish kings were crowned, was transferred from Dunstaffnage, in the 9th century, to Scone, whence it was removed by Edward I., in 1296, to Westminster Abbey; since which it has been enclosed within the frame-work of the regal chair on which the British sovereigns have been crowned since Edward II. There were no fewer than four monasteries in Perth (ex. one in Scone), two nunneries, and eight chapels. But the violence of the Presbyterians at the Reformation may be said not to have left a relic of these buildings. Here, in 1437, James I. was assassinated in the Blackfriars' Monastery. And here, in August, 1600, Gowrie House was the scene of that most mysterious incident in the history of Scotland, entitled the *Gowrie conspiracy*: of which, if not the contrivers, Earl Gowrie and his brother were, at all events, the victims. The house was pulled down about 50 years since, to make room for the county buildings, which occupy its site. Perth is associated with many other important events in Scottish history; in 1644, it was taken by Montrose, after his victory at Tippermuir, in the neighbourhood; in 1651 it capitulated to Cromwell; and it was occupied by the insurgents in the rebellions of 1715 and 1745.

At Ruthven Castle, now called Huntingtower, 2 m. W. Perth, took place, in 1582, the singular occurrence in the history of James VI., called the *Raid of Ruthven.*

Before the passing of the Reform Act, Perth was united with four other bors. in sending 1 mem. to the H. of C.; but that act conferred on it the important privilege of returning a representative for itself. Registered voters, 1,158 in 1865. Perth is an opulent bor.; the corporation revenue for 1863–64 amounted to 7,523*l.* Perth, though it never was the see of a bishop, is called a city; and, in the rolls of the Scottish parliament, it held rank next to Edinburgh. Its chief magistrate has the title of lord provost. It has, also, a dean of guild, ranking next to the lord provost, as a councillor, but not as a magistrate; 4 bailies, a treasurer, and 19 other ordinary members of council.

The situation of Perth is one of the finest in Scotland. Close to the city, on the E., is the hill of Kinnoul; the summit of which, of easy access, commands one of the noblest prospects that is anywhere to be met with. Towards the S. and E. is the valley of the Tay, and the confluence of the Tay and Earn; to the W. is a finely variegated country, and to the N. the prospect is bounded by the stony girdle of the Grampians. The country round Perth is amongst the most fertile in Scotland.

PERU, a country of S. America, formerly one of the most valuable possessions of the Spanish crown. It then included the modern republic of Bolivia (S. or Upper Peru); but at present the term is restricted to the republic of N. or Lower Peru, lying chiefly between lat. 3° and 21° S., and long. 65° and 81° W.; having N. the Columbian republic of Ecuador, E. Brazil, SE. and S. Bolivia, and W. the Pacific. Extreme length, SSE. to NNW., about 1,500 m.; breadth varying from 40 to 600 m. The area is estimated at 508,986 sq. m. It is divided into 10 provs.; and its population, according to a rough enumeration made in 1860, amounts to 2,865,000, the greater part of them descendants of Spanish settlers, mixed with natives.

Physical Geography.—The country is naturally divided into 3 regions: that between the coast and the Andes; that occupied by the latter; and the region E. of the Andes, forming a part of the basin of the Amazon. All these divisions differ widely in their physical character. The coast region from Tumbez, on the N. frontier to the river Leche, is mostly a desert; and wherever, in fact, the coast region is not traversed by streams, or is unsusceptible of irrigation, it consists principally of arid sandy wastes, and is in the last degree barren. The Andes and their ramifications have been roughly estimated to cover, in Peru, an extent of 200,000 sq. m. They consist here, as in Bolivia, of two main chains, or Cordilleras, connected in various parts by cross ranges, and inclosing several extensive and lofty valleys. Round Cuzco is a vast knot of mountains, occupying about three times the extent of Switzerland; and round Pasco, in lat. 13° S., is another knot surrounding the plain of Bombon, 13,500 ft. above the sea level, and in which are the rich silver mines of Cerro de Pasco. The Peruvian Andes are not in general so elevated as the Bolivian, though many of their peaks rise far above the limits of perpetual snow. The loftiest summits are towards the S., where the Nevado de Chuquibamba (about lat. 15°) reaches to 21,000 ft. in height; and several other mountains surrounding the valley of Desaguadero, which belongs partly to Peru, approach this elevation.

In Bolivia the E., but in Peru the W., Cordillera is the highest. At the mountain-knot of Pasco, the Andes separate into the 3 collateral chains, which, proceeding N., separate the basins of the Maranon, Huallaga, and Ucayale. The last range of the Andes to the E., in Peru, extends between the 6th and 15th parallels of lat., at a distance varying between 200 and 400 m. from the Pacific, and separates the basin of the Ucayale from those of the Yavari, Beni, and other affluents of the Amazon.

The space enclosed between the gigantic ridges of the E. and W. Cordillera, called the Sierra, is partly occupied by mountains and naked rocks, partly by table-lands yielding short fine grass, and extensive hilly pasture-ground, very like, in general outline, to the Highlands of Scotland, though destitute of heath, and partly by extensive and fertile valleys, that once supported a much larger amount of population. The third region, or country E. of the Cordilleras, is very little known: it is mostly covered by all but interminable forests; and a large portion of it can scarcely be said to belong to Peru, since only a few R. Cath. missions are here and there scattered over its surface, the rest of the country being in the exclusive possession of the native Indians.

Peru gives birth to some of the largest rivers in the world. The Tunguragua, generally regarded as the proper source of the Maranon or Amazon, and its vast confluents the Huallaga and Ucayale (the latter formed by the junction of the Apurimac and Paro), have their sources on the E. side of the W. Cordillera, between 10½ and 16° S. lat.; and pursue, though with many windings, a northerly

Digitized by Google

course till they leave the country. These great rivers are mostly navigable; and, with the assistance of steam-navigation, will no doubt, at some future period, carry the riches of this remote region across the continent to the ports on the Atlantic. The great lake of Titicaca is mostly in Peru; but, excepting it, there is no other large lake. There are, however, some smaller lakes, one of which, the lake of Llauricocha, to the N. of the Cerro de Pasco, gives birth to the Tunguragua.

The coast is throughout rugged and lofty. In the N. provs. some miles of a loose sandy desert intervene in a few places between the high lands and the ocean; but in general the cliffs approach close to the shore, which has not, perhaps, in an extent of 1,600 m., a dozen secure harbours. The best are those of Callao, Payta, Sechura, Salina, Pisco, Islay, Iquiqua, and a few others. Truxillo and Lambaqeque have only open roadsteads. The water being almost uniformly deep, vessels are obliged to approach within ¼ m. of the shore, before they can anchor; and the prodigious swell which rolls in unbroken from the Pacific occasions a heavy and dangerous surf. The operation of landing is, except in a few places, at once difficult and hazardous: it is effected by means of *balsas*, or platforms raised on inflated skins, and differing in shape in different parts of the coast. The *balsa* used by Captain Hall off Mollendo, was 'made of two entire seal-skins inflated, placed side by side, and connected by cross pieces of wood and strong lashings of thongs; over all a platform of cane mats forms a sort of deck, about 4 ft. in width and 6 or 8 ft. in length. At one end the person who manages the *balsa* kneels down, and by means of a double-bladed paddle, which he holds by the middle, and strikes alternately on each side, moves it swiftly along; the passengers or goods being placed on the platform behind him. All the goods which go to the interior, at this part of the coast, are landed in this manner. The great bars of silver, and the bags of dollars, also, which are shipped in return for the merchandise landed, pass through the surf on these tender, though secure, conveyances.' (Hall's S. America. i. 205, 206.)

Climate.—The year may be divided into two seasons, the wet and the dry. From June to October, the coast lands in all the S. and central provs. are covered during the night and morning with a dense fog, the only moisture supplied by nature to this part of the country. These fogs diminish as we proceed N., and in the N. prov. of Piura, which is celebrated for its dry atmosphere, rains occasionally occur; and when such is the case, the *arenales*, or arid sands, are speedily clothed with the most exuberant vegetation. While, however, the dry season prevails on the coast, and especially from Jan. to March, heavy rains fall in the mountains, frequently accompanied with thunder, which never occurs along the coast. The extensive valleys between the Cordilleras, such as that of Cuzco, 10,000 ft. above the level of the sea, enjoy an admirable climate; and though between the tropics have, in consequence of their elevation, all the advantages of the best climates of the temperate zone, with but few of their disadvantages. Beyond this, and at the level of about 14,000 ft., commences the limit of perpetual snow. Even in the coast region the temperature is not so high as might be supposed from the latitude, cooling S. winds being uniformly prevalent, and the sea-breezes by day alternating with others blowing from the land at night. The mean temp. of the year in Lima is about 70° Fahr. Wheat and other European *cerealia*, though but little cultivated, succeed admirably in the elevated valleys of the Sierra; potatoes thrive best at an elevation of from 11,000 to 13,000 ft. The country is, on the whole, salubrious. Colics, bilious and inflammatory diseases, small-pox, and hydrophobia are common; but in Lima and many other parts of the country, individuals frequently live to an advanced age.

Peru is more subject, perhaps, than any other country to the tremendous visitation of earthquakes. Shocks are felt every year; and they occasionally become so violent as to be productive of the most disastrous consequences. The earthquake which occurred in 1746 swallowed up the entire sea-port town of Callao, and destroyed the greater part of the city of Lima. The years 1687, 1806, and 1828 were, also, distinguished by the occurrence of severe and most destructive shocks.

Minerals and Mines.—Peru, like Mexico, is famous for her mineral products; and for a long time the world was accustomed to associate her name with the almost unlimited abundance of gold and silver. But, though the most exaggerated notions of the value and importance of the Peruvian mines were long prevalent, they have no doubt furnished vast supplies of the precious metals. The famous mine of Potosi, in Bolivia, or Upper Peru, was discovered by accident in 1545: it produced, for a lengthened series of years, vast quantities of silver; but it is now comparatively neglected, and is supposed to be nearly exhausted. The greater number, as well as the most productive of the mines that are at present wrought, are situated in the Cerro de Pasco, in the dép. of Junin. They were, like Potosi, accidentally discovered in 1630.

The produce of the Peruvian, like that of the Mexican, mines has materially declined since the commencement of the revolutionary struggle. Humboldt, who had the best means of obtaining accurate information, estimated the annual value of the gold and silver produced in Peru, at the commencement of the present century, at 6,240,000 dolls. (1,248,000*l.*) 'It may be affirmed,' says Mr. Cocks, British consul at Islay, Peru (Commercial Reports received at the Foreign Office between July 1st, 1863, and June 30th, 1864), 'it may be affirmed with truth, that the whole of Peru is one vast mine, of which the hand of man hitherto has only scratched the surface. The most important silver mines known are met with in Cerro de Pasco, Hualgayoc, Puno, Huantajaya, Castro-Veriyna, San Juan de Lucanas, Caillouna, Huallanca, and Queropalca (the two last in the province of Huamalies.) From the first are extracted annually more than 300,000 marks, from the second about 36,000, from the third 40,000, and from San Juan de Lucanas about 3,000. The gold mines most worthy of mention exist in Pataz, Huaillura (province of Condesuyos), the province of Jarapaca, Santa Tomas (province of Chachapoyas), Cerro Blanco (near Nasca), and in the ravine of Chaparra. The *washings of gold* are in Chuquibamba (province of Huamabis), the river Chinchipe (Borja), which is at present in the power of the savages, and in many other parts of the *Montaña*,—above all, in Caravaya.'

Huancavelica has one of the richest quicksilver mines in the world, one portion of which (St. Barbara) furnished 5,000 quintals a year of quicksilver for two centuries. It is said that the metal might be procured here at an expense of 65 dolls. the quintal; though quicksilver is so scarce in Peru as to cost from 200 to 220 dolls. per quintal. Exclusive of the above, Peru produces iron, copper, tin, coal, and saltpetre. The latter, under the name of nitrate of soda, has, within the last few years, become an important article of export.

Vegetable products are numerous. Sugar, rice,

Digitized by Google

tobacco, yams, sweet potatoes, and cocoa are raised in the warmest situations; the vine, wheat, and quinoa (*Chenopodium quinoa*) are planted in colder places, and potatoes on the highest cultivated grounds. The grapes are well flavoured, but the wine made from them is inferior. The sugar cane is mostly the creole species. Three sorts of maize are cultivated, and this grain, which forms the principal farinaceous food of the modern inhabs., appears to have been also the principal formerly in use among the Indians, large quantities having been discovered in subterranean granaries, where it had probably remained from a period previously to the Spanish conquest. Cotton is grown in almost every part of Peru, and the Peruvian ranks immediately after the Sea Island and Egyptian cotton in the English markets. Except in the prov. Piura, it is all short stapled. The culture is rapidly increasing, and it may now be considered one of the staple products of the country. Lucerne is a good deal grown for provender: it reaches the height of 3 ft., and is cut five times a year. Culinary vegetables abound; beans, with potatoes, forming the principal food of the lower classes in the uplands. Olives succeed well in certain districts, and oil is extensively produced, but it is inferior to that of France or Italy. Plantain, bananas, guavas, and other tropical fruits, with oranges, lemons, nectarines, plums, and others common to Europe, are found in great profusion. Bark, and numerous medicinal plants, with cedar, ebony, mahogany, walnut, and other valuable timber trees abound in the forests. The valuable and well-known drug called Peruvian bark consists of the rind of the *Cinchona lancifolia, oblongifolia, cordifolia*, &c., and is, consequently, of several varieties. The genus *cinchona* is supposed to be confined to the Andean ranges between lat. 10° N. and 22° S., where it grows luxuriantly to the height of 10,000 ft. above the sea. The provs. of Loxa, Ecuador, and Huanuco are those in which the bark is principally obtained; and during a lengthened period after its first introduction into Europe, in 1640, it was called Loxa bark, from the former of these provs. Its collection begins in May and continues till November. The trees are cut down close to the root; the stems are then divided into pieces of uniform length; and about three or four days afterwards the bark is taken off in broad stripes. The price which the article fetches depends on the rapidity with which it is dried, which is effected by exposing the bark with the least possible delay to a hot sun, which makes the pieces roll up and sometimes form a solid cylinder, without any cavity in the centre. It is afterwards carefully packed in bales of 4 or 5 arrobas each, and exported in chests closely covered with skins. (Poeppig, Com. to Bot. Mag., i. 249). Coca, the dried leaf of the *Erythroxylon coca*, is largely used by the Peruvians for chewing, much in the same way as betel in the East. Poeppig says that indulgence in its use brings on a gloomy kind of mania; but other authorities deny that it has any such effect.

Agriculture, which was never in a prosperous state, has, like every other branch of industry, been greatly neglected since the revolution. Dr. Smith (Peru as It is, ii. 40–46) gives an account of the agriculture of a district between the Cordilleras, which he says may serve for that of the *Sierra* generally. 'The agriculture of Huanuco, though alluring to the eye of the ordinary traveller, who only glances at its rich and waving fields of maize, inclosed within tapias or fences of mud, and hedges of the Indian fig and aloe or maguey plants, is in every way defective. The fields owe their luxuriance to nature rather than man, except in the single advantage of water, which he often directs and supplies to them. Manure is a thing never thought of, and the implements of husbandry are of the rudest kind. The plough, slight and single-handed, is constructed merely of wood, and without a mould-board. The ploughshare is a thick iron blade (or, where iron is not at hand, a piece of hard iron-wood), only tied, when required for use, by a piece of thong, or lasso, on the point of the plough, which divides the earth very superficially. Harrows they have, properly speaking, none; but sometimes use, instead, large clumsy rakes, or a green bough dragged over the sown ground, with a weight upon it to make it scratch the soil. Instead of the roller, they break down the earth intended for cane-plants, after it has got eight or ten ploughings and cross-ploughings, with the heel of a short-handed hoe. For smoothing down the clods of earth, some Indians use a soft, flat, round stone, about the size of a small cheese, which has had a hole beaten through its centre by dint of blows with a harder and pointed stone. To the stone thus perforated they fix a long handle; and as they swing it about they do great execution in the work of *cuspiando* or field levelling. Lucerne, or *alfalfa*, is cut down, and used green, cattle and working oxen for the plough and sugar-mills being fed on it; yet the scythe is not in use among the great planters, who find it necessary to keep two or three individuals at the sickle to cut down food for herds, which, in the daytime, are fed on irrigated pastures, but at night in corrals or pens. The inhabs. are accustomed to break up potatoe grounds on the face of steeps with deep narrow spades having long handles. In the same manner the soil is turned up by those who have neither plough nor oxen, but who yet sow maize on the temperate flats on the hill sides. People thus circumstanced make holes in the ground with a sharp-pointed stick, where they bury the seed. The Indian sows the white grained maize in preference to the yellow, as he considers that, when toasted, it makes the best '*cancha*,' or substitute for bread; and that when boiled it makes the best '*mote*' or simply boiled maize: it has moreover the credit of making the most savoury *chica* or beer, which they home-brew whenever they have a little surplus grain. They also make a kind of beer from the fermented juice of the maize stalks compressed between small rollers of wood turned by the hand. Dry maize leaves and stubble are most used in the foddering of cattle. The sugar mills in the valley of Huanuco are mostly made of wood, and wrought by oxen. On the larger estates small brass rollers are used; but water-power is not thought of, the proprietors adhering to the old practice of working with oxen day and night throughout the year, barring accidents, and feasts, and holidays.'

The *wild animals* include the puma, or American lion; the uturuncu (*Felis onsa*, L.), a kind of tiger cat; the acumari (*Ursus Americ.*, L.), a black bear inhabiting the mountains; the *anas*, or skunk; great numbers of deer, wild boars, and armadillos, which are objects of the chase; and several varieties of animals, as the llama, alpaca, guanaco, and vicuna, used, especially the llama, by the native Peruvians, previously to the Spanish invasion, as beasts of burden. Four varieties of the condor are included among the native birds. Alligators are met with in the rivers; but neither the reptile nor the insect tribes appear to infest Peru so much as the country around Guayaquil and some other regions within the tropics.

Of the *foreign quadrupeds* acclimated in Peru, sheep appear to have succeeded best. They have

Digitized by Google

increased in an amazing degree on the great commons or pastures of the Andes, at an elevation of 12,000 or 14,000 ft. above the sea. Few sheep are bred on the coast; but, during certain months, large flocks are driven from the interior, and fattened for the Lima market. Many of the ewes are in lamb, and the common bargain between the drover and the farmer is to give the lambs for the pasturage, the farmer calculating on receiving 150 lambs for every 100 ewes. Besides this increase, which is greater than in England, the ewes bear twice a year, generally in June and Dec. Little attention has been hitherto paid to breeding sheep, so as to improve the wool; but as the latter is now becoming an increasing article of export, more care will doubtless be bestowed on this object. The largest quantities of wool exported are from Islay, and are chiefly produced in the neighbourhood of Lampa, Puno, and Cuzco. It is soft and similar in appearance to English wool; but, being badly cleaned, it does bring but a low price; that from the mountains between Lima and Pasco, being better cleaned, usually brings 1*d.* per lb. additional. The wool produced on the coast is of very inferior quality. Vicuna wool is exported, but only in small quantities. In the high region, cattle, horses, and asses are of a stunted size; but in the valleys and on the coast they are large, spirited, and showy.

The cattle of Peru are not so large as those of Lincolnshire; but, at an average, they are as large as the English, French, and Spanish cattle: when fed on lucerne, the meat is well flavoured, fat, and juicy, and the bones very small. The black cattle of the Sierra do not agree with the climate of the coast, and when brought there speedily die. Ordinary horses and mules fetch from 45 to 50 dolls. each. Piura is noted for its excellent breed of the latter, and many mules are taken thence to Truxillo and Lima, where they sometimes fetch 250 dolls. each. The same prov. is also famous for its goats. A good many pigs are reared in Peru; they are considered fit for market at from 10 to 16 months old, when they sell at from 6 to 9 dolls. each, if of a good breed.

The *population* consists principally of native Indians, Spaniards, negroes, and the races of mixed origin derived from the foregoing; but of the number of each there is no authentic estimate. The accounts of the Indians given by recent travellers are in many respects conflicting. They are generally represented as in the lowest stage of civilisation, without any desire for the comforts and conveniences of civilised life, immersed in sloth and apathy, from which they can rarely be roused, except when they have an opportunity of indulging to excess in ardent spirits, of which they are excessively fond. Their habitations are miserable hovels, destitute of every convenience or accommodation, and disgustingly filthy. Their dress is poor and mean, and their food coarse and scanty. Their religion is still tainted with the superstition of their forefathers; but they are great observers of the external rites and ceremonies of the church, and spend large sums in masses and processions; a species of profusion to which they are excited and encouraged by their priests, who profit by it. The oppressions to which they have since been subject in recent times have probably sunk them to a lower point in the scale of civilisation than they formerly occupied; and, no doubt, it would be possible, were proper care taken, materially to improve their habits and condition. A good deal, too, of their apathy and little progress in arts and industry, must be ascribed to the physical circumstances under which they have been placed—the mildness of the climate and the fertility of the soil, which, on the one hand, by diminishing their wants, and, on the other, by enabling them to supply those which they do feel with comparatively little exertion, take away and greatly weaken some of the most powerful motives that prompt to labour and invention.

The principal burden to which the Indians were subject, under the Spanish government, was that of the *mita*, or compulsory labour in the mines. All male Indians, from 18 to 50 years of age, were compelled, during a certain specified period, to undergo this servitude. Its severity had, however, been materially abated previously to the revolution, and it was then entirely suppressed.

Manufactures are in a very backward state, though many of the natives evince considerable ingenuity. In Tarma they make *ponchos*, or loose cloaks of great beauty and fineness, and on the colder table lands warmer and coarser blankets and ponchos. In the valleys, goat skins are made into cordovans, cow-hides into saddle-bags, and travelling cases for bed and bedding, and mats for carpeting from rushes. Cordage for packing is manufactured from the maguey in Piura; and at Guamanga is made the fine filigree silver work, for which inland Peru is celebrated. But, in general, the manufactures of Europe have, in the larger towns, superseded those of the natives, and are supplied to Peru in exchange for raw produce.

Trade.—Bullion is by far the most important of all the articles exported from Peru. Among the other articles are alpaca, vicuna, and sheep's wool, saltpetre, Jesuits' bark, copper ore, hides, cotton, chinchilla skins, and guano. The latter is found in large quantities on some parts of the coast of Peru, but it is principally brought from some small islands opposite to Pisco, where it is found in immense quantities. The stock in Chincha, one of the islands referred to, was recently estimated at about 17,000,000 tons, and that in the whole group at about 40,000,000 tons. Being within the rainless region of Peru, the guano of these deposits is much superior to that which has been found on the Chilian coast, and in some parts of Africa. The total value of the imports, at the various ports of Peru, was as follows in the year 1862:—

Ports	Imports in 1862	
	Dollars	£
Iquique . . .	1,500,000	300,000
Arica	4,000,000	800,000
Islay	2,500,000	500,000
Callao . . .	18,000,000	3,600,000
Huanchaco . .	500,000	100,000
San José . . .	200,000	40,000
Payta . . .	400,000	80,000
Total . .	27,100,000	5,420,000

The value of the exports, in the same year, was as follows:—

Ports	Exports in 1862	
	Dollars	£
Iquique . . .	3,000,000	600,000
Arica	3,000,000	600,000
Islay	3,000,000	600,000
Callao . . .	22,800,000	4,560,000
Huanchaco . .	500,000	100,000
San José . .	200,000	40,000
Payta . . .	400,000	80,000
Total . .	32,900,000	6,580,000

The remains of the Incas' road, extending through the centre of Peru from Quito to Cuzco, a distance of 1,500 m., may, according to Hum-

Digitized by Google

boldt, be compared with the finest Roman roads; though, when it is recollected that the Peruvians were ignorant of the arch, and that their bridges were made of ozier ropes, this statement will probably appear a little extravagant. Various passes were also cut in the steep acclivities of the Andes by the Peruvians before the Spanish conquest. The roads laid down by the European masters of the country bear no comparison with the foregoing. They consist, indeed, with a few exceptions in the vicinity of the large cities, only of foot tracks for horses or mules, and goods are chiefly conveyed on the backs of the latter.

Government.—The government is popular and representative, the sovereignty, in theory at least, emanating from the people. Peru has a senate or chamber of deputies, consisting of an uncertain number of members, which delegates the executive power to the other high authorities of the state. The president of the republic is elected for the term of six years. The chamber of deputies consists of representatives elected by the electoral colleges of provs. and parishes. The parochial electoral colleges consist of all the citizens resident in a par., for every 200 of whom an elector is nominated; and in every village with an amount of pop. entitling it to name an elector, a municipal body is established, subject to the approbation of the departmental *juntas*. The electoral colleges of provs. are composed of parochial electors constituted according to law, who elect deps. to congress in the proportion of 1 for every 20,000 inhabs. The prov., however, in which the whole pop. does not come up to 10,000, may nevertheless send a deputy. The government of every dep. is vested in a prefect, that of a prov. in a sub-prefect, that of a district in a governor, and that of every town or Indian village in an *alcalde*, who is entrusted with the command of the local police. To fill the foregoing appointments, it is required that the candidate should be an active and approved citizen above thirty years of age. The prefects are charged with the economical administration of their respective deps., but are strictly prohibited from interfering with the course of popular elections, or the functions of departmental juntas. The latter are bodies sitting in the cap. of each dep., composed of two mems. from each prov., elected in the same manner as the mems. of the senate, and whose functions include the assessing of taxes, examining the accounts, and determining the military force, of the dep.

Justice, in all the deps., is administered in the name of the republic; and in every town are justices of the peace, whose business is to endeavour to bring about an amicable termination without a formal lawsuit, few suits being, in fact, admitted without some preliminary attempt at settlement. In some provs. the functions of the judge are exercised by the sub-prefect. Justice is not said to be positively corrupt, but the law being ill understood by many judicial functionaries, civil suits especially have been frequently decided on erroneous principles. Few of the municipalities have revenues adequate to the maintenance of a sufficient police; the latter is said to be better in Junin than in the other deps. The prov. prisons are bad and insecure. Every one enjoys the right of citizenship, excepting vagrants, gamblers, drunkards, and those who, without cause, abandon their wives, or are divorced on account of misconduct.

The state religion is the Roman Catholic; and Peru having been the country in which the direct influence of Spain was perhaps more felt than in any other of her transatlantic possessions, a great deal of intolerance was formerly shown towards individuals of a different creed, though a considerable portion of this has disappeared since the establishment of the republic. Lima is the seat of an archbishop, who holds the chief ecclesiastical authority. The Jesuits in the 17th century, and afterwards the Franciscan monks, established various Indian missions in the E. parts of the country. But these have almost all gone to decay; and the former missionary college of Ocopa, about 12 m. SE. Tarma, suppressed at the revolution, but afterwards restored, is by no means flourishing, and many Indians of the interior are relapsing into paganism. The clergy are said to be careless of their duties, and lax in their morals. The Indians and curates are often chattering and driving hard bargains in relation to first fruits (for tithes are collected by the state), marriages, burials, and religious festivals, which latter are closely interwoven with the entire social system of the country.

Schools for reading, on the Lancastrian plan, are common in the capital, and exist in the larger provincial towns, and all the white children are taught the elements of instruction. Lima has a university and several other colleges; but the former has seldom more than 50 students, and the latter establishments have mostly dwindled into insignificance. Superior education is confined to a very few among the whites, and ornamental almost universally takes precedence of useful instruction: the negroes and Indians have rarely any education except what is necessarily acquired in the ordinary intercourse between man and man. There are some good libraries in the cap., and a medical college; but medical science generally is at a very low ebb. In the rural districts especially, what is called medicine is the grossest quackery, and other branches of general science are not in a much better condition. There are few hospitals or other charitable institutions, such foundations having been mostly suffered to fall into decay.

The constitution provides that a national militia shall be raised throughout the country; but in most of the provs. it can hardly be said to exist, except in name. The standing army in 1864 numbered 16,008 men, including 5,408 *gensdarmes*; while the navy, in the same year, consisted of 1 steam frigate, 5 steamers, and 1 brig, armed, in the aggregate, with 60 guns. The public revenue amounted to 4,289,293*l.* in the year 1864; nearly three-fourths of this comparatively large sum was derived from the sale of guano. The public debt, in 1864, amounted to 11,691,752*l.*

History.—When the Spaniards under Pizarro and Almagro arrived in Peru, in 1532, they found that country under the dominion of the Incas, who, according to the traditions of the Indians, had held the sovereignty about four centuries. The first Inca, Manco Capac, had either immigrated from some distant country, or been a person of very superior acquirements. He pretended that his sister, Ocollo, whom he married, and himself were children of the sun, and that they were sent to instruct the rude and barbarous natives in the duties of religion, and in arts and civilisation. He made Cuzco the cap. of his dominions; and, having erected a temple to the sun in that city, appointed 12 virgins of the blood royal to act as priestesses to the divinity, and became both the highpriest and lawgiver of his people. The government and manners of the Peruvians were, as compared with those of the Mexicans, mild in the extreme. Still, however, a considerable number of the attendants of the Incas were sacrificed on their death, and interred with them, that they might appear in the next world with their former dignity, and be served

Digitized by Google

with the same respect. The remains of the roads, aqueducts, palaces, temples, and other structures scattered over the country, attest the advanced state of civilisation at which the Peruvians, as compared with most other Americans, had arrived. The empire of the Incas fell an easy conquest to Pizarro and his bloodthirsty comrades. It continued in possession of the Spaniards till 1821, when Lima, having submitted to a Chilian army under San Martin, its independence was declared on the 28th of July. Since that time Peru has been, like the other old Spanish colonies, involved in all but perpetually occurring vicissitudes.

PERUGIA (an. *Perusia*), a town of Central Italy, cap. prov. of the same name, on the railway between Rome and Florence, about equidistant from the Mediterranean and Adriatic, and 85 m. N. Rome. Pop. 41,850 in 1862. The town stands on the summit and declivity of a hill, 700 or 800 ft. in height. It is fortified, though not strongly, being defended, exclusive of its walls, by a castle, erected by Pope Paul III., in 1543. It is irregularly laid out, but well built, and has several public buildings and remains of antiquity that are worth notice. The cathedral is a large Gothic edifice, which would be handsome, were it not so party-coloured. Like many of the other churches, it is rich in works of art, having paintings by Barrocci, Guido, and Perugino, exclusive of four famous pictures by Raphael—the Annunciation, Circumcision, Assumption, and Adoration of the Magi. The churches of St. Dominico and St. Francisco are interesting, the last being a very handsome specimen of early Italian architecture. The *palazzo pubblico* is a remarkable specimen of Italian Gothic. Among the antiquities are an arch, reported to have been built by Augustus; and a circular building, still tolerably perfect, of Roman origin. There are numerous public fountains, one of which, in the principal square, has been ornamented with bass-reliefs and statues by Arnolfo da Lapo. Perugia has a university, with about 200 students, several academies, numerous convents, two theatres, a bull-ring, and an admirable ground for playing *pallone*. The city is a bishop's see, the seat of a tribunal of primary jurisdiction, and a board of police. It has manufactures of carpets, silk goods, prepared skins, hats, cream of tartar, soap, and wax candles, and some trade in wines, oil, and other agricultural products.

Perugia is scarcely inferior in antiquity to Cortona, and was its equal in rank among the cities of Etruria. Antony having shut himself up in the city, it was taken, after a stubborn resistance, by Octavius Cæsar, who dismissed Antony; but the city was hardly dealt with, more, as Velleius says, through the irritation of the soldiers than the inclination of the general. (lib. ii. cap. 74.) It was annexed to the papal dominion by Julius II., in 1512. The famous painter, Vanucci, surnamed Perugino, was a native of this city.

PESARO (an. *Pisaurum*), a coast town of Central Italy, prov. Pesaro e Urbino, on the Toglia, near its mouth, in the Adriatic, 20 m. N. by E. Urbino, on the railway from Bologna to Ancona. Pop. 19,883 in 1862. The town is surrounded with fortifications, and is well built. The streets are clean and airy, and it has in general a neater appearance than most towns of Italy. Its market-place is ornamented with a fountain, and a marble statue of Pope Urban VIII. Being the see of a bishop, it has its cathedral, and the usual complement of churches and convents. It has no harbour, but merely an open roadstead. Some of the churches are remarkable for their paintings, as are several of the houses of the higher ranks. The palace of the former dukes of Urbino is now occupied by the governor of the province. There are many handsome private residences, 2 hospitals, a foundling asylum, and a good theatre. The aqueduct, which conveys water to different parts of the town, is supposed to be a work of the Romans, and there are the remains of an ancient bridge and theatre. Silk and cotton stuffs, glass bottles, and cream of tartar are produced on a small scale; but the inhabs. are principally employed in the trade in agricultural produce, the surrounding country, which is rich and well-cultivated, producing the best figs in Italy, with wine, olives, and silk. There are several handsome villas in the vicinity, one of which was occupied in 1818–19, by Queen Caroline of England.

Pisaurum was a Roman colony. It is noticed by Catullus,

—— 'moribunda sede Pisauri.' Carm. 82.

But the defects in its climate, which made it be so characterised, have been to a considerable extent obviated by the drainage of some adjacent marshes. The famous musical composer, Rossini, was a native of, and resident in, this town.

PESHAWER (the 'Advanced Post'), a considerable city of Affghanistan, cap. of a principality of the same name, which for some time belonged to Runjeet Singh. It stands in a nearly circular plain, about 35 m. in diameter, and watered by many branches of the Caubul river, 140 m. E. by S. Caubul, and 236 m. NW. Lahore; lat. 34° 6′ N., long. 71° 13′ E. Pop. estimated at 60,000. The city is built on uneven ground, and is upwards of 5 m. in circ. The houses are mostly built of unburnt brick, inclosed in wooden frames, and are commonly three stories high, the lower story being usually occupied by shops. The streets, though narrow, are paved, and have a kennel in the middle. Two or three brooks run through the town, skirted with willows and mulberry-trees, and crossed by bridges. There are many mosques, but no public building to deserve notice. Many of the houses in the city are untenanted and in ruins; in the plain numerous villages are deserted.

Peshawer is well situated for trade, and should the Indus come to be extensively navigated by British vessels, Peshawer would most likely become a considerable entrepôt for the trade between India and Affghanistan, Khorasan, and the countries N. of the Hindoo Koosh. The inhabitants are very mixed, but principally of Indian origin, and occupied in commerce. The shops are well supplied with fruits and other provisions, saddlery, boots and shoes, woollens, hardware, books, and other manufactured goods.

The city is said by some authorities to have been founded by Acbar; but the district of Peshawer is mentioned in the histories of the 10th century; and it is more probable that it should have taken its name from a city already existing, than the reverse. Peshawer was, however, greatly improved and enlarged by Acbar, in the 16th century.

PESTH, a city of Hungary, on the E. side of the Danube, 135 m. ESE. Vienna, immediately opposite to Buda, with which it is connected by a magnificent suspension bridge, on the railway from Vienna to Temesvar. Pop. 136,566 in 1860, excl. of garrison. The city stands on level ground, and being almost wholly of modern date, is much more regularly laid out and handsomely built than Buda. The streets, which are mostly wide and straight, are paved and partially furnished with trottoirs, some of them being, in the splendour of their shops and their elaborately painted signs, little inferior to those of Vienna. The squares are generally very well built; but from the want of

Digitized by Google

some object in the centre, they look bare and deserted; besides affording room for the accumulation of those heaps of sand with which the city is infested, but which might be prevented by planting round the outskirts. The growth of Pesth within the last few years has been most rapid. Along the river-side, which formerly was nothing but a marsh, is now a wide quay, partially paved and walled in, and lined for several miles by a succession of handsome buildings. Near the centre of these are the new theatre and *Redouten-saal*, or public ball-room; and at one end, ornamented with a portico like the last-named edifice, is the national casino, established by Count Szechenyi. It is open to strangers, who may use it during their stay in Pesth, and its reading-room is furnished with the leading newspapers and magazines of Europe. A part of the establishment is appropriated as a casino for tradesmen, and in the centre of the building is a very fine ball-room. Among the most conspicuous of the public edifices is the *Neugebaüde*, in the suburb of Leopoldstadt, begun by Joseph II. in 1786, a structure of immense size, 4 stories in height, ranged round 4 spacious areas, and used as a barrack and artillery depôt. Pesth has only a small number of churches in proportion to its size and pop., and none is particularly distinguished for architectural beauty. Service is performed in them according to the United Greek, R. Catholic, Dissenting Greek, Lutheran, and Calvinistic rituals, and in the German, Hungarian, Slavonic, and Greek languages. There are also several synagogues. Besides the large theatre on the quay, an elegant national theatre, destined solely for Hungarian performances, has been completed by the aid of a grant from the diet. The grenadiers' barracks, county hall, Jesuit college, and two or three of the hospitals, are worth notice. Pesth has many noble palaces and other private residences, and excellent hotels and coffee-houses.

The city is distinguished by its establishments devoted to the higher branches of scientific instruction. Its university, established at Tyrnau in 1633, and transferred thither from Buda by Joseph II., in 1784, is the only one in Hungary, and one of the most richly endowed in Europe. The instruction is entirely gratuitous; it has about 50 professors, an observatory on the Blocksberg in Buda, a large botanic garden, a veterinary hospital, and about 1,000 students. The National Museum, founded in 1802, has a fine library, rich in Hungarian MSS.; a complete collection of Hungarian coins from the 10th century; collections of minerals, fossils, antiquities (principally Roman, and others, found in Hungary and Transylvania; historical relics and specimens of manufactures. The Hungarian academy of sciences, originally founded for the cultivation of the Magyar language, has received many munificent donations, and has an income of about 2,000*l.* a year. It publishes transactions, and gives annual prizes for the best works in Hungarian. Pesth has, also, a gymnasium, Rom. Cath. and Lutheran seminaries, an English conventual school for noble ladies (*Englisch Fraüleinstift*), a teachers' seminary, many primary, and Greek, Protestant, and Jewish schools. The chief judicial tribunals are the *Curia Regia*, or Royal Table, and the *Septemviral Tafel*, so termed because it originally consisted of 7 members, but was extended so as to include the palatine, 4 prelates, 9 magnates, and 7 other nobles. There are various charitable institutions. Several newspapers are published in the Hungarian language. Though near the extreme verge of European civilisation towards the E., Pesth has all the appearance and conveniences of a city of W. Europe. The greatest variety of costume may be seen in Pesth, especially at the four great annual fairs, which are attended by at least 20,000 strangers, many of them from very distant parts. The business transacted at these fairs is very extensive.

Pesth manufactures silk and woollen fabrics, leather, straw hats, oil, and tobacco; but its principal manufacture is that of *meerschaum* pipe-bowls. These, which consist of the species of earth called *kaf-kil*, dug in the Crimea, are first rudely fashioned in Constantinople, but are finished for the German markets in Pesth. They are thence conveyed to Vienna, and ultimately to the fairs of Leipsic and Frankfort, where the best fetch from 3*l.* to 5*l.*, and even 7*l.* sterling. A considerable intercourse is kept up between Pesth and Buda. The amusements of both cities differ little from those of the German capitals. The theatres, coffee-houses, and public gardens in the neighbourhood are the favourite places of resort. Immediately beyond the barriers of Pesth is the *Rákos Mezö*, a wide plain on which the diets of Hungary were held for many centuries, and on a part of which horse-races, somewhat after the English fashion, are held yearly in May or June.

Pesth is supposed to occupy the site of the *Transacincum* of the Romans, on the ruins of which a town was afterwards built by Arpad. Bela IV., in the 13th century, surrounded the town with walls, and it subsequently rose to considerable commercial importance. It was held by the Turks 160 years. The present town, one of the best built and handsomest in the Austrian dominions, may be said to have wholly grown up since the reign of Maria Theresa. It suffered severely in 1838 from an inundation of the Danube, which destroyed 1,200 houses in the older part of the city.

PETERBOROUGH, an episcopal city and parl. bor. of England, in liberty of its own name, co. Northampton, on the navigable river Nen, 37 m. NE. Northampton, and 75 m. N. by E. London, on the Great Northern railway. Pop of city, 11,735 in 1861. Area of parl. bor. (which includes the entire par. of St. John the Baptist, with the Minster precincts), 1,430 acres. The city consists of several streets close to the N. bank of the river, regularly laid out, well-paved, and lighted with gas, the houses generally being well-built, and some of recent erection. The principal public building is the cathedral, formerly attached to a Benedictine monastery, founded here in 870, and regarded at the Dissolution as one of the most magnificent abbeys in the kingdom. It is a regular cruciform structure of Norman and early English architecture, erected during the 12th century. The dimensions of the interior are, length 476 ft.; breadth of nave and aisles, 78 ft.; breadth, including the great transept, 203 ft.; breadth of transepts, 69 ft.; height of ceiling, 78 ft.; ditto of lantern, 135 ft.; length of the W. front 156 ft.; height of the central tower, 150 ft. A tower and spire once stood over the NW. transept; but the latter has been taken down. The approach to the cathedral has a very monastic appearance. Passing under a Norman gate, with later additions, a court is entered, the right side of which is formed by the domestic buildings of the abbey, and at the end is the noble front of the church, consisting of three fine early English arches; but their beauty is much impaired by the small chapel or porch, which, in another place, would have been very beautiful. The E. end is circular, and the aisles are made out square by perpendicular additions. The choir has a handsome stone screen, which has been substituted for one of wood. The nave is a very good specimen of that description of Norman work which has its piers composed of shafts. There are few

Digitized by Google

monuments, shrines, or chantry chapels, the parliamentary troops having plundered the church of most of its ornaments of this description. Catherine of Aragon and Mary queen of Scotland were interred here; but their graves are not marked by any sepulchral monument. The remains of the monastic buildings in the court fronting the cathedral are of varied style, but present, on the whole, a valuable specimen of bold outline, both of plan and elevation. The cathedral corporation consists of the dean and six prebendaries, who divide among them a nett revenue of 5,118*l.*: there are also four minor canons and a precentor. Peterborough was erected into a bishop's see by Henry VIII., and the diocese now comprises the cos. of Northampton, Rutland, and Leicester.

The par. church is a spacious building, lately remodelled, and put in repair: the living is a vicarage in the gift of the bishop. The Independents, Baptists, and Wesleyan Methodists have also their respective places of worship, and there are Sunday schools attended by upwards of 200 children of both sexes. The cathedral grammar school, founded by Henry VIII., is attended by about 30 boys, and endowed with 3 scholarships and a fellowship at St. John's College, Cambridge. There are 2 charity schools for boys, and a national school is attended by about 300 boys and 120 girls. There are numerous other charities, including a pretty large infirmary and a dispensary. The town-hall is a small but neat structure, the area beneath being used as a market-place. The corn exchange, a substantial building, was erected in 1848.

The trade of Peterborough arises chiefly from the transit of corn and malt, large quantities of which are brought down the Nen from the interior: it also imports coal, timber, bricks, stone, and other goods. The city has much profited by the erection of a vast central station of the Great Northern railway, with extensive locomotive works. Peterborough is not incorporated, but under the jurisdiction of the dean and chapter, whose steward holds a court for the trial of civil actions within the city. Quarter sessions are likewise held here for the liberty of Peterborough, and it is one of the polling places at elections for the N. division of the co. Peterborough has returned 2 mems. to the H. of C. since the 1 Edward VI., the right of election down to the Reform Act being in the inhabs. paying scot and lot. The electoral limits were enlarged by the Boundary Act, so as to include with the old bor. the remainder of the par., and the extra-parochial precincts of the cathedral. Registered electors, 640 in 1865. Markets on Saturday: fairs, July 1 and Oct. 1, chiefly for cattle.

PETERHEAD, a parl. and mun. bor. and seaport of Scotland, co. Aberdeen, on the point of a flat, rocky promontory, projecting into the German Ocean, 27 m. NNE. Aberdeen, being the most easterly point of land in Scotland. Pop. 7,541 in 1861. Peterhead was erected into a bor. of barony by the family of Keith, earls marischal, on whose estate it was built in 1593. On the attainder of that family, it was purchased by the York Buildings' Company, who sold it to the governors of the Merchant Maidens' Hospital of Edinburgh, who are now the superiors of the town, and have always been its patrons. It did not, however, attain to any distinction till about 1770, soon after which the famous engineer, Smeaton, was employed to construct a harbour on the S. side of the promontory on which the town is built. This harbour, though on a small scale, was sufficient to demonstrate the importance of the place, and the advantage that would result, not merely to the town itself, but to the shipping employed on the E. coast of Scotland, from the improvement of the harbour. In consequence measures have been undertaken and carried into effect during the present century for excavating the rocks that obstructed the S. harbour, and for constructing a new and extensive harbour and graving dock on the N. side of the peninsula. These great works have been completed, at an expense of above 30,000*l.*, and Peterhead has, in consequence, been rendered one of the best harbours on the E. coast of Scotland. The area of the S. harbour is 6·6, and that of the N. nearly 11 acres. They are formed by strong moles projecting into the sea.

The streets are well lighted with gas, and the town is supplied with excellent water, brought from a distance of above 2½ m. Among the public buildings are the town-house, with a handsome spire 125 ft. in height, and the par. church, a building 118 ft. in height. A handsome cross, consisting of a Tuscan pillar of granite, surmounted by the arms of the earl marischal, was erected in 1832. The town has a fine church, an episcopal chapel, with chapels for the Associated Dissenters, Independents, and Methodists. It has also a scientific association, a news' room, a valuable museum, 2 public libraries, 4 branch banks, and various friendly societies. There are mineral springs within the bor. that used to be a good deal resorted to, but they are now comparatively neglected. Except rope-making and ship-building, Peterhead has no manufactures. On the 1st of January, 1864, there belonged to the port 16 sailing vessels under 50, and 53 above 50 tons. The inhab. early engaged in the N. Sea whale-fishery, and carried it on for a lengthened period with great vigour and success. It is also, next to Wick, the most important station for the herring fishery. The cod or white fishery is also prosecuted to a considerable extent. The products of the fishery form a considerable portion of the exports from the port; but, exclusive of these, very considerable quantities of corn, butter, and other agricultural products, are exported. Great quantities of granite are also occasionally exported. The gross amount of customs' revenue, in 1863, was 2,236*l.*

The Reform Act conferred on Peterhead the privilege of sending a mem. to the H. of C. in conjunction with the bors. of Elgin, Banff, Cullen, Inverury, and Kintore. Registered electors in the united bors., 1,000 in 1865. The bor. has 12 councillors.

PETER-LE-PORT (ST.). See GUERNSEY.

PETERSBURG, a governm. of Russia in Europe, being that in which the cap. is situated, between 58° and 60° 30′ N. lat., and 28° and 34° E. long.; having N. the Gulf of Finland, the gov. of Wyborg, Lake Ladoga, and the gov. of Olonetz; E. and SE. Novgorod; S. Pskof; and W. the Lake Peipus, and the gov. Revel. Area, estimated at 15,000 sq. m. Pop. 1,083,091 in 1858. The country is generally flat; but in the N. and SE. are a few undulating hills. The general slope is towards the NW.: all the rivers, the principal of which is the Neva, flow to the Gulf of Finland, or Lake Ladoga. The soil is mostly sandy and thin; and the climate damp, severe, and unhealthy. At an average, frost prevails, more or less, for 160 days in the year. Rye, barley, oats, and some wheat are grown, but the climate is unfavourable to the culture of corn; and nearly 2-3ds of the prov. is covered with wood, marshes, and lakes. Timber, indeed, forms the chief source of wealth, deals and masts being the great articles of export, and the villagers subsisting chiefly by making wood-work of different kinds. The trade

Digitized by Google

is limited, in a great measure, to the capital. The best agriculturists are German colonists, who raise flax, hemp, and, above all, kitchen vegetables, for the supply of the capital. Russians form the majority of the inhabs.; the remainder being composed of Finns, Carelians, Ijors, and Germans, most of whom are Lutherans. This gov. is divided into 9 districts; Petersburg, the cap., is the only place of importance.

PETERSBURG, the modern metropolis of the Russian empire, and one of the largest cities of Europe, at the E. extremity of the Gulf of Finland, where it receives the river Neva, by which the city is intersected, and at the terminus of lines of railway from Moscow and Warsaw. Pop. 550,341 in 1858. The city, which is of a circular form, stands partly on the main land, on the S. side of the Neva, and partly on islands formed by its branches. It owes its existence to Peter the Great, by whom its foundations were laid in 1703. At first all the public buildings and houses were of wood, and were huddled together without regard either to regularity or convenience. But brick and stone buildings were soon after introduced; and the streets were laid out on a regular plan, crossing each other at right angles. This was greatly facilitated by the ravages of destructive fires in 1736 and 1737, which having destroyed some thousands of the old houses, enabled government to lay down judicious regulations for their reconstruction. The empress Elizabeth did much to improve the city; but it is chiefly indebted for its regularity, beauty, and magnificence to the empress Catharine II. Under this princess the principal channel of the Neva was faced by noble granite quays; several new streets and canals were opened; and seven of the finest public buildings and monuments were either rebuilt on an improved plan, or constructed of wood. The late and present emperors have also distinguished themselves by their efforts to improve and embellish the city. It is now one of the finest in Europe, unmatched for the width and regularity of its streets, the length and magnificence of its quays, and the elegance of its squares and public buildings.

Among the latter, which are principally situated on the quays bordering the main channel of the Neva, and in the street entitled the Nefski Perspective, may be specified the Winter Palace, or ordinary residence of the emperor, a vast but heavy building. It communicates by a gallery with the Hermitage, another palace, long the residence of Catharine II.: the latter has attached to it the court theatre, and contains a noble picture-gallery, a valuable library, and an extraordinary rich collection of engraved stones and jewels. There are also the Marble Palace, the Palace of Anitchkoff, formerly occupied by the reigning monarch, the Taurida Palace, built by Catharine II. for her favourite Potemkin. The admiralty, an immense brick building, occupies the centre of the city; it contains storehouses, docks for the construction of men-of-war, and a very extensive collection of objects connected with navigation and natural history. The high gilt tower of the admiralty, erected by the empress Anne in 1734, is one of the most striking objects in approaching Petersburg. Among the other public buildings are the hotel of the academy of the fine arts, accounted one of the finest in the city; the exchange; the palace of the senate; the hotel *de l'état major*, a magnificent building; the barracks for the guards; the new theatre; the exchange bank; imperial library; foundling hospital; and hotel of the land cadets. The citadel, founded by Peter the Great, but since reconstructed, stands on an island in the centre of the city. It is a regular hexagon, and has a tower 360 ft. in height. Among the churches may be specified the cathedral of our Lady of Kasan, consecrated in 1811. It is built on the model of St. Peter's at Rome, and is one of the finest ornaments of the capital. The cathedral of St. Peter and St. Paul was founded by Peter the Great in 1712; it is of large dimensions, but it derives its principal interest from its containing the tombs of all the Russian sovereigns, from its illustrious founder down to the late emperor, with the exception of that of Peter II., interred at Moscow. The church of the convent of St. Alexander Nefski, at the end of the magnificent street to which it has given its name, occupies the third rank among the churches of Russia. The mausoleum of the saint is of solid silver; several distinguished persons are interred in the church; and there is attached to it a grammar school on a very large scale, having generally about 800 pupils. The cathedral of St. Isaac is one of the largest and finest churches in the city.

Petersburg contains some noble monuments: at the head of these may be placed the magnificent equestrian statue of Peter the Great by Falconet. The monarch is represented in the attitude of mounting a precipice, the summit of which he has nearly attained. His head is uncovered and crowned with laurel; he wears a loose vest, in the Asiatic style, with half boots, and sits on a housing of bear-skin; the right hand is stretched out, as in the act of giving benediction to his people, and the left holds the reins. The design is masterly, and the attitude bold and spirited. The horse is springing upon the hind legs, and the tail, which is full and flowing, appears slightly to touch a serpent, artfully contrived to assist in supporting the vast weight. The contrast between the composure of Peter and the fire of the horse, eager to press forward, is very striking. The simplicity of the inscription corresponds to the beauty of the design—PETRO PRIMO, CATHARINA SECUNDA, 1782. The pedestal on which this noble statue is erected is a gigantic rough block of granite. It was found at a distance of several miles from the capital, and its conveyance thither was a work of extraordinary difficulty. The column erected in honour of the emperor Alexander I. is one of the finest of its kind. It is 150 ft. in height; the pedestal is of granite and bronze; the shaft of the column consists of a single piece of red granite, 84 ft. in length and 14 ft. in diameter. This, which is the largest monolith in the world, was cut from the quarries of Pyterlar, in Finland, several m. from Petersburg. The column is surmounted by a capital and a small dome in bronze, on which is placed a statue emblematical of religion. The cottage occupied by Peter the Great during the foundation of Petersburg is still preserved. It is built of wood, painted in the Dutch style, and is not 20 ft. high.

Petersburg has a great variety of institutions for the promotion of education and literature. The university, founded in 1819, has already attained to considerable distinction, and has nearly 1,000 pupils and 90 professors. The *medico-chirurgical academy* founded by Peter the Great, and reorganised by the emperor Alexander I., for the instruction of medical men, enjoys a high reputation; two hospitals, on a large scale, are attached to it; the instruction is gratuitous, and the number of pupils may amount to 520. A sum of 386,290 roubles a year is appropriated to the support of this establishment. The education is good and the examination strict. Among the other educational institutions may be specified the military schools (see art. RUSSIA); the theological aca-

Digitized by Google

demy; the school for training and instructing schoolmasters; the Oriental institution, founded in 1823; the school of commerce and navigation; the technological institution; the Protestant school of St. Peter, at which above 500 children of both sexes are educated; two gymnasiums or colleges; the schools of Sendluoi and St. Catherine, for the instruction of nearly 700 young ladies; the military orphan school; the grammar school of St. Alexander Nefski, already alluded to, and a number of others. Petersburg has some noble libraries, and scientific and literary collections. The imperial library, one of the largest and finest in the world, contains about 445,000 printed vols. and 20,000 MSS. The academy of sciences, founded by Peter the Great in 1724, has long occupied a distinguished place among such bodies. It contains a valuable library, an Asiatic museum, with cabinets of medals and natural history. It is also furnished with an observatory, whence the Russian geographers reckon their first meridian. The Imperial Russian academy and the academy of fine arts are celebrated all over Europe; and there are a great number of similar institutions. The botanic garden is extensive, and has a valuable collection of exotics.

The hospitals are numerous and well endowed. The most celebrated is the foundling hospital, founded by Catharine II., and much improved and enlarged by the empress Maria Fœdorouna. The establishment costs about 1,000,000 roubles a year. The city hospital and the imperial hospital, for sick poor, are both on a large scale. There is also an institution for deaf and dumb persons, and a blind asylum.

The Neva is deep, rapid, and its waters as clear as crystal. The main stream, which is broader than the Thames at London Bridge, is crossed by 3 bridges, and its branches by 3 others. These are all of boats, and are removed in the beginning of winter, before the river is frozen over. But there are a great number of other bridges joining the various portions of the city: some of these are of iron, some granite, others wood, and others suspension bridges. The granite quay, along the S. side of the Neva, is a stupendous work, above 3 m. in length. The S. side of the town is intersected by canals, of which the Fontanka is the finest. The streets are, for the most part, paved with stone; a few, however, are floored with logs of timber, and some macadamised. The foot pavements are generally good; but the carriage ways, in wet weather, become very dirty. Many of the brick houses are stuccoed and painted, so as to have the appearance of stone; but the number of genuine stone houses is very limited indeed, and wooden houses predominate. The better class of houses are covered with iron or copper, and the inferior with tiles. The principal houses have arched door-ways, under which carriages enter, and spacious court-yards.

Owing to the barren nature of the soil round the city, most part of the provisions required for its consumption have to be brought from a great distance by canal or by sledges. An extraordinary market for butchers' meat, game, and fish, is held at the conclusion of the fast, ending the 28th Dec. (O.S.), at which a large proportion of the inhabs. supply themselves with provisions for the remainder of the winter. The carcasses of the vast quantities of oxen, sheep, hogs, and fowls, brought to this market, are all frozen; the smaller animals are piled up in pyramids, but the larger ones, which are skinned, and set on their legs in rows, alongside each other, have a ghastly and frightful appearance to persons not familiar with such exhibitions. They are cut in pieces with hatchets, and when carried home are preserved in snow cellars, of which each house has one. Previously to its being dressed, the frozen meat is thawed in cold water, but it loses much of its flavour, and all families of condition use fresh killed meat. The length and severity of the winter necessarily occasions a great demand for fuel. This consists partly of coal from England, but chiefly of wood, and as the neighbourhood does not afford a sufficient supply, vast quantities are brought from the interior. The barges, too, which arrive from the latter, are almost all broken up, and used either as timber in the construction of houses, or as firewood. Flour and billet magazines have been erected by government, for the accommodation of the poor in scarce and severe seasons.

Some manufacturing establishments are carried on upon account of the crown, but the greater number belong to private individuals. Among those belonging to the crown are manufactures of gunpowder, tapestry, and porcelain, and a cannon foundry. Among the private manufactures are those of silks, cottons, sail-cloth, woollens, paper, leather, stuffs, tobacco, wax-cloth, soaps, and types: there are extensive glass works at Oserski, near the city; and there are great numbers of watchmakers and jewellers, coachmakers, mathematical and musical instrument-makers.

Petersburg has the most extensive foreign trade of any city in the N. of Europe. This arises not so much from its great pop. as from its being the only great maritime inlet on the Gulf of Finland, and from its vast and various communications with the interior. By means partly of canals, but principally of rivers, Petersburg is connected with the Caspian Sea, goods being conveyed from the latter to the capital, a distance of 1,434 m., without once landing them. The iron and furs of Siberia and the teas of China are received at Petersburg in the same way; but, owing to the great distance of these countries, and the short period during which the rivers and canals are navigable, they take years in their transit by water. Immense quantities of the less bulky and more valuable species of goods are also brought to the city during the winter upon the ice in sledges.

The principal article of export is tallow; and, next to it, are hemp and flax, iron, copper, grain, particularly wheat, timber, potashes, canvass and coarse linen; linseed and hempseed; linseed and hempseed oils; furs, hides, leather, bristles, fox, hare, and squirrel skins; cordage, caviare, wax, isinglass, and tar. The principal imports are sugar and other colonial products; cotton yarn, raw cotton, and cotton stuffs; dye stuffs, wines, silks, woollens, hardware, linen, salt, lead, tin and coal. The total value of the imports was 80,352,272 roubles, or 12,722,443*l.* in 1860; 84,950,034 roubles, or 13,450,423*l.* in 1861; and 64,972,817 roubles, or 10,287,362*l.* in 1862. The total value of the exports amounted to 49,896,556 roubles, or 7,900,288*l.* in 1860; to 42,179,993 roubles, or 6,678,500*l.* in 1861; and to 47,488,160 roubles, or 7,512,625*l.* in 1863.

Though well situated for commerce, the position of the city is, in most other respects, far from good. The ground on which it stands is low and swampy, and the surrounding country partakes of the same character, and is covered with forests. No one less bold and enterprising than Peter the Great would have dreamed of building a large city in such a situation, and no one with less gigantic means at his disposal would have been able to carry such a project into effect. But no art can ever overcome the defects inherent in its situation.

Digitized by Google

The climate is severe, foggy, wet, and variable in an unusual degree. The sub-soil is so very porous and saturated with water, that it is hardly possible to excavate a cellar any where in the city, and there is the greatest difficulty in constructing sewers to carry off filth and other impurities. But the great drawback on Petersburg consists in its little elevation above the level of the sea and the river, and its consequent exposure to the most dreadful inundations. These are generally occasioned by a W. or SW. wind, accumulating the water of the gulf at the mouth of the river, and preventing the free exit of the latter. The years 1726, 1752, 1777, and 1824 have been particularly distinguished by these inundations. The last of these visitations was the most appalling and destructive. The whole city was laid under water; above 8,000 individuals perished, and property to a vast amount was destroyed.

The amusements of Petersburg are modified by the religion and the climate. There are six theatres, and plays are acted in Russian, German, French, and sometimes English. The actors are all paid by government, and do not, in any degree, depend on their audiences. The *personnel* of the theatres comprises about 1,200 individuals. During winter the national amusements are sledge-driving and sliding down artificial elevations, similar to those called in Paris the *Montagnes Russes*. All classes use the vapour bath: the public baths in the city are estimated at about 350. The country in the vicinity of Petersburg being flat and marshy, presents few rural beauties. The imperial family have country residences at Oraniembaum, on the Gulf of Finland, Rammanoi Osteof, Peterhof, Czarkoselo, and other places. Czarkoselo, situated on the Neva, about 16 m. from Petersburg, is an exception to the general rule, inasmuch as it stands on an eminence rising 220 ft. above the river; Paulosk, in the vicinity of Czarkoselo, is also considerably elevated.

The palace of Czarkoselo is reckoned the finest summer residence belonging to the Russian monarchs. The town, though small, is handsome and improving. It has a lyceum, with 14 professors, a forest school, and is the cap. of a circ. Paulosk has also a pretty little town dependent on it. These have always been favourite resorts of the citizens of Petersburg; and have become still more so through a railway—the first of the kind constructed in the empire—having been opened between them and the capital.

PETERSBURG, a town and river-port of the United States of N. America, state of Virginia, on the Appomattax, a trib. of the James River, 21 m. S. by E. Richmond. Pop. 18,270 in 1860. The town, which was rebuilt in 1815, after an extensive fire, is regularly laid out, and comprises many handsome houses, with churches and other public buildings, including a masonic hall. Its inhab. carry on an active trade in cotton, flour, and tobacco; and it has pretty extensive manufactures. The falls of the river, close to the town, furnish ample water-power, and it has many cotton-mills, flour-mills, brass and iron foundries, tanneries, oil-mills, &c. The river is navigable up to the town for vessels drawing 7 ft. water; but large ships unload at City Point, near the mouth of the river.

PETERSFIELD, a parl. bor., market town, and par. of England, co. Southampton, and hund. Finch-dean, near the Loddon, 15 m. NNE. Portsmouth, on the London and South Western railway. Pops. of parl. bor. (which includes with the old bor. the tithing of sheet, the several pars. of Buriton, Lyp, and Froxfield, 3 tithings belonging to the par. of East Meon and the par. of Steep, with the exception of 2 tithings), 5,655 in 1861. Petersfield is a small, clean, country town, its principal street crossing the Portsmouth and London road, nearly at right angles. The church is a large brick structure, with a low, square tower. The Wesleyan Methodists and Baptists have their respective places of worship, with attached Sunday schools. The endowed charity school, called Churcher's College, was founded in 1722, and furnishes clothing and food, with general and mathematical instruction, to 10 or 12 boys. The bor. was incorporated in the reign of Elizabeth, and is governed by a titular mayor and common council, chosen annually at the court-leet of the lord of the manor. It returned 2 mems. to the H. of C. from the reign of Edward I. down to the Reform Act, the right of election being in the freeholders in general within the bor., though, in point of fact, it has been for many years a close bor. belonging to the lord of the manor. The Reform Act deprived it of one of its mems., and the Boundary Act enlarged the electoral limits, so as to include with the old bor. the additional pars. and tithings mentioned above. Registered electors 316 in 1865. It is also one of the polling places at elections for the N. div. of Hampshire. Markets on Saturday, and fortnightly cattle fairs on alternate Wednesdays; other fairs, Mar. 5, July 10, and Dec. 11, for sheep and horses.

PETERWARDEIN, or PETER-VARA, the cap. town of the Slavonian military frontier, and one of the strongest fortresses in the Austrian empire, on a scarped rock, on the S. bank of the Danube, opposite Neusatz; 46 m. NW. Belgrade. Pop. 5,695 in 1857, exclusive of garrison, which is usually about 3,000 strong, though there are barracks adapted for 10,000. Peterwardein has several churches and schools, and communicates with Neusatz by a bridge of boats defended by a strong *tête du pont*. It is the residence of the general commandant of the Slavonian military frontier and several subordinate military authorities. It is supposed to occupy the site of the ancient *Acumincum*, and derives its present name from Peter the Hermit, who marshalled here the soldiers of the first crusade.

PETHERTON, NORTH, a market town and par. of England, co. Somerset, hund. its own name, 7½ m. NE. Taunton. Area of par. 11,080 acres. Pop. 3,943 in 1861. The town consists of one long street, in which are many well-built houses and a spacious market-place. The principal buildings are, the par. church, a handsome edifice, a chapel-of-ease, and an endowed school for 20 boys. The inhab. are chiefly employed in retail trade and agriculture. A large corn market was formerly held here; but it has long since declined in favour of that held at Bridgewater. Fairs, May 1 and the Monday before Nov. 13.

PETRA, a once famous but now deserted city of Arabia Petræa, the metropolis of the Nabatheans, nearly half way between the head of the Gulf of Akabah (an. *Ælaniticus Sinus*) and the Dead Sea; in about lat. 30° 15′ N., long. 35° 35′ E. It is situated on a small stream, at the foot of Mount Hor, in a fissure or chasm, about 1½ m. in length by ½ m. in breadth, surrounded on all sides by precipitous and mostly inaccessible rocks, except on the E., where the rivulet escapes, and where it is entered by a gorge, which hardly affords room enough for two horsemen to ride abreast. The statement of Pliny is as correct as it is brief:—'*Nabatæi oppidum includunt Petram nomine in convalle, paulo minus II. mill. passuum amplitudinis, circumdatum montibus, inaccessis, amne interfluente*'. (Hist. Nat., lib. vi. cap. 32.) Its name of Πέτρα a *Rock*, which afterwards became

Digitized by Google

that of the surrounding country, has been obviously derived from its situation. It has been long deserted, and its very site had become a matter of doubt and conjecture. But in 1812 it was visited by Burckhardt; and it has since been explored by Captains Irby and Mangles, M. de Laborde, Lord Lindsay, Mr. Robinson, and other travellers. Altogether its position and ruins are most extraordinary; and show, not less conclusively than those of Palmyra, the wealth and civilisation of which the commerce of the ancient world was the prolific source. The city, of which there are some magnificent relics, appears to have occupied the entire extent of the chasm. The rocks, also, with which it is surrounded, with those along the gorge by which it is entered, are almost all hollowed out and cut into tombs, temples, and other public and private structures, of extraordinary magnificence, including a large theatre. Nowhere, perhaps, have the habitations of men and their final resting-places been brought into such immediate contact as at Petra. Even the approaches to the theatre are lined with tombs. The ruins, though many of them are doubtless of great antiquity, appear principally to belong to the Roman period; and the only inscription found among them is in Latin of the age of Adrian or Antoninus Pius.

Petra, from its great natural strength and its position, was peculiarly well fitted to serve as a safe and convenient entrepôt for the extensive caravan trade carried on between Phœnicia and Arabia and the Persian Gulf. The products native to Arabia Felix, and those brought to its ports from India and Africa, were conveyed to Petra, partly by caravans which performed the entire journey by land, and partly by caravans from Ælana, at the head of the Ælanitic Gulf, to which they were sometimes conveyed by sea. There was, also, at a very remote epoch, a caravan route from the important emporium of Gerrha, on the W. side of the Persian Gulf, to Petra. According to Pliny, it had a direct communication with Palmyra. (Hist. Nat., *ubi supra.*) It was the wealth resulting from this extensive trade that filled the rocky girdle of the city with a rich, a refined, and an enterprising population, and gave them abundance, though in the middle of vast deserts.

The history of Petra is involved in much obscurity. There appears to be little doubt that it is identical with the Selah and Joktheel of the Bible. (2 Kings, chap. xiv. v. 7.) The reports of its riches having excited the cupidity of Antigonus, general of Alexander the Great, and king of Syria, he made two efforts to effect its subjugation. But, in both instances, he was defeated, though his forces in the second expedition were commanded by his son Demetrius, celebrated for his skill in the besieging of cities. (Diodorus, lib. xix. §§ 95, 97 and 98.) Petra appears to have preserved its independence down to the reign of Trajan, when it submitted to his victorious arms. (Dion Cassius, lib. lxviii. cap. 14.) It would seem, from inscriptions on coins still extant, that Adrian, the successor of Trajan, had conferred his name on Petra. But from that epoch it is no more heard of in history. The commerce to which it owed its existence, was gradually diverted into other channels; and it has now nothing to interest save its wonderful ruins.

PETWORTH, a market town and par. of England, rape of Arundel, co. Sussex, hund. Rotherbridge, on Arun, 13 m. NNE. Chichester, and 42 m. SW. London. Area of par. 6,140 acres: pop. 3,368 in 1861. The streets are very irregular, but there are many well-built and some handsome houses, besides a fine market and sessions house near the centre of the town. The church, a neat stone edifice, has a square tower: the living is a rectory in the gift of the earl of Egremont, the lord of the manor. The Wesleyan Methodists and Independents have also places of worship, and there are various Sunday schools and a national school, almshouses, a hospital, and a house of correction on the plan of Howard. A considerable retail trade is carried on for the supply of the neighbouring gentry; but most of the inhabs. are engaged in agriculture. The Epiphany and Easter-quarter sessions for the W. div. of Sussex are held here, and petty sessions on alternate Saturdays. Petworth is one of the polling-places at elections for the W. div. of the co. Markets on Saturday: fairs, Holy Thursday, July 29, and Oct. 2.

Close to the town is Petworth House, the seat of the earl of Egremont, which, both for the elegance of its exterior and the sumptuousness of its internal fittings, may vie with the finest mansions of the English nobility: the park, which is inclosed by a wall, 12 m. in circ., is beautifully laid out, and commands many picturesque as well as extensive views.

PEZENAS (an. *Piscena*), a town of France, dép. Hérault, cap. cant., near the junction of the Hérault and Peine, 24 m. WSW. Montpellier. Pop. 7,204 in 1861. The town is finely situated, and its old castle commands a magnificent prospect. Several of its streets are wide and lined with good houses. It has a handsome par. church, and had formerly many conventual churches; but one of these has been converted into a distillery, another into an hotel, and a third into a theatre. Pezenas is the seat of a tribunal and chamber of commerce, and a comm. coll. It has manufactures of woollens, cotton stuffs and yarn, and linens. But it is principally celebrated for the great fair held here in September, which is attended by dealers from all parts of the S. of France. A great deal of business is then transacted in wool, woollens, cottons, and other fabrics.

PHILADELPHIA, the second city, and formerly the cap. of the U. States of N. America, state Pennsylvania, between the Delaware and Schuylkill, about 6 m. above their confluence, 80 m. SW. New York, and 123 m. NE. Washington. Pop. 562,529 in 1860, and 340,045 in 1850. The city, which is about 4 m. in length N. to S., by about 2 m. in breadth, is divided into square compartments by wide and well-paved streets crossing each other at right angles. It is lighted with gas, and drained by sewers, which discharge themselves into the Delaware. It is also admirably supplied with water from the Schuylkill, by means of some very extensive dams and reservoirs erected at Fairmount, near the city, at an expense of 432,512 dollars. There is a great air of neatness, and of almost peculiar cleanness about the city; but the extreme regularity of the streets is tiresome. The steps of the outer stairs of a great part of the houses are of white marble, and the tops of the outer railings of brass. The streets are generally shaded with trees, a very desirable luxury in this hot climate. The public buildings, which are generally constructed of white marble, are among the most elegant in the U. States. The United States bank, built on the model of the Parthenon; the Pennsylvanian bank; the mint of the U. States, a handsome edifice, with Ionic porticos, 62 ft. in length on each front; the exchange, ornamented with Corinthian columns, and comprising a spacious hall and news-room; the post office; the Girard bank; Girard college, a noble structure, entirely

Digitized by Google

surrounded with a colonnade of Corinthian columns; and masonic hall, are the buildings most remarkable for beauty; but the most interesting is the state house, whence the Declaration of Independence was promulgated, on the 4th July, 1776.

There is an immense number of churches and places of public worship, including two synagogues. The U. States arsenal; the state penitentiary, on the panopticon principle; the county prison, a massive granite building in the castellated Gothic style, with upwards of 400 cells; and the debtors' prison, demand notice. The Schuylkill is here crossed by two wooden bridges; one of which has an entire length of 1,130 ft.; the other is a single arch, and probably the widest existing, its span being 324 ft. Philadelphia is remarkable for the number and excellence of its benevolent institutions. On the bank of the Schuylkill is the almshouse, consisting of four distinct ranges of building, comprising nearly 4,000 rooms. The Pennsylvania hospital, established in 1752, is one of the first institutions of the kind in the Union. The whole extent of the buildings from E. to W. is 278 ft.; and detached from the hospital is another building of three stories, calculated to accommodate numerous patients. There are belonging to the hospital a valuable anatomical museum and a library. In 1817 a handsome building was erected for the accommodation of West's painting of 'Christ Healing the Sick,' which is a valuable source of income to the hospital. The U. States marine asylum, capable of accommodating 400 men; Wills' hospital; and the various institutions for the blind, the deaf and dumb, the Magdalen, and orphan asylums, are established upon a most liberal scale. The academies and learned institutions are equally distinguished.

The university of Pennsylvania, founded in 1755, occupies a large edifice originally built for the president of the U. States. It has faculties of arts, medicine, natural science and law, with an attached junior academy and charity school. It has an excellent philosophical apparatus, and a considerable library. The university is chiefly distinguished as a medical school. There are here two other medical colleges, attended by about 200 students. The Philadelphia library, which originated with Dr. Franklin, and was incorporated in 1742, occupies an elegant edifice, in front of which is a statue of Franklin in white marble. There are belonging to it a museum, a philosophical apparatus, the Philadelphia library and the Loganian library, which together have about 22,000 vols. The American Philosophical Society, established here in 1769, has a library of 9,000 vols. The Philadelphia Society for promoting Agriculture was instituted in 1785, and has a library, a cabinet of minerals, and a repository for agricultural implements. The oldest seminary in Pennsylvania is that incorporated by William Penn, under the title of Friends' Public Schools. It has considerable funds, and supports a number of schools, which give instruction in the Latin and Greek languages, mathematics, and natural and experimental philosophy. The astronomical observatory in the city belongs to this institution, and it has an extensive philosophical apparatus. The Athenæum, incorporated in 1815, has a library of 5,000 vols., a cabinet of minerals and medals, and upon its tables are to be found the principal newspapers of the United States and Europe, and a numerous collection of American and European magazines. The Academy of Natural Sciences has a good cabinet and a library of 5,000 vols; the Pennsylvania Historical Society and the Franklin Institute have both published valuable transactions. There are several good theatres and excellent market-houses: the markets are, perhaps, the best supplied of any in the U. States.

Philadelphia is distinguished also as a manufacturing city, having shot, nail, cotton, paper, rope, and glass manufactories, with numerous printing-offices, marble works, tanneries, breweries, and distilleries; and is inferior only to New York, New Orleans, and Boston in the extent of its commerce. It has the advantage of a double port: that on the Schuylkill, being the shallowest, is the grand depôt for the vast quantities of coal brought from the interior; while the other, on the Delaware, having water sufficient to float the largest merchantmen close by the quays, is exclusively resorted to by the shipping engaged in foreign trade. The city communicates by numerous canals and railroads with the interior of Pennsylvania and the states bordering on the Mississippi. The value of the imports from foreign countries may be estimated at from 10 to 13 million dollars a year; but the principal business of the port is its coasting trade with New York, Baltimore, Boston, and other American cities, which she supplies with various descriptions of manufactured goods, flour, and provisions. The subjoined table gives the total value of the foreign exports and imports (from a return of Mr. Kortright, British consul) at the port of Philadelphia, in each of the years 1853 to 1863.

Years	Exports	Imports
	Dollars	Dollars
1853	6,527,996	18,834,410
1854	10,104,416	21,359,306
1855	6,274,338	15,309,935
1856	7,144,488	16,585,685
1857	7,135,156	17,850,630
1858	5,987,251	12,890,369
1859	5,298,095	15,603,769
1860	7,839,286	14,531,452
1861	10,277,938	8,094,161
1862	11,518,970	8,327,976
1863	10,628,968	6,269,530

There entered the port of Philadelphia, in the year 1862, 555 vessels, of a total burden of 171,882 tons. Of these, 406 vessels, of 131,127 tons, were American, and 149 vessels, of 40,755 tons, were foreign.

For municipal purposes, Philadelphia is divided into six wards or districts, and is governed by a mayor, a recorder, fifteen aldermen, and a select and common council, annually chosen by the citizens. The mayor's court has the same jurisdiction as the county courts or quarter sessions. The city sends seven representatives and two senators to the state legislature.

Philadelphia was founded by William Penn, in 1682. The first congress of the Union was held here in 1774, and in 1776 the Declaration of Independence issued from its press. It was occupied by the British in 1777 and 1778. It continued from the last-mentioned year down to 1800 to be the cap. of the Union.

PHILIPPINE ISLANDS, a group of islands of the Eastern Archipelago, principally included in its 5th division, forming, Cuba excepted, the most valuable colonial possession still belonging to Spain, between the 5th and 20th deg. N. lat., and the 117th and 124th deg. E. long., having N. the Balintang Channel, which divides it from the Batanes and Basher Islands; E. the Pacific Ocean; S. the Strait of Basilan, separating it from the Sooloo Archipelago to the E. of Borneo; and W. the Chinese Sea. Aggregate area, including Palawan, 134,115 sq. m. Of these islands,

Digitized by Google

ten are large, and the rest of very inferior size, their extent and pop. being estimated as follows:—

Islands and Provinces		Area in Sq. Miles	Population
Luzon (18 provs.)		56,604	2,264,897
Las Islas Bisayas	Mindoro	4,155	29,632
	Panay (3 provs.)	4,516	406,030
	Isla de Negros	3,774	35,622
	Zebre	2,162	250,817
	Layte	4,198	92,165
	Samar	5,470	99,635
	Masbate	1,215	2,310
Palawan		7,558	11,997
Magindanao (2 provs.)		35,637?	74,560
Smaller Islands, including the Islas de Calamianes		8,826	15,000?
Total of 30 Provs.		134,115	3,500,000

According to other estimates, the total population of the islands is above four millions.

Luzon, the largest of these islands, and that which is best known to Europeans, is of extremely irregular shape, but may be described as a long and narrow island, running N. and S., with a peninsula (called Camarines) stretching out at its SE. side, its length from Point Cabicunga northward, to Point Calaan southward, being about 450 m., and its breadth ranging from 10 to nearly 140 m. The coast generally is rocky, and indented with numerous bays and gulfs; on the E. side is the Seno de Lamon, a deep narrow inlet, nearly separating the peninsula of Camarines from the rest of the island, and on the W. side are the Gulf of Lingayen, the Bay of Manilla, the Ensenada de Balayan, and the Seno de Ragay. A large portion of the surface is covered with mountains; and N. of Manilla the chains are divided by the Cagayan, the largest river of the island, into two nearly parallel ranges, called Sierra Madra and Sierra de los Caravallos, that terminate respectively in the Points Cabicunga and St. Vincent, the extreme N. points of the island. The latter range is the most elevated; but even its highest peaks do not rise more than 6,000 ft. above the sea. S. of Manilla the chain may be traced into the peninsula of Camarines, a large portion of which it covers, and finally terminates in the Punta Calaan. The plain of Pampanza N. of the city of Manilla, extends northward nearly as far as the Gulf of Lingayen, from which it is separated by a ridge of rather lofty hills: it is about 90 m. in length by about 30 m. in breadth, and being watered by a river falling into the Bay of Manilla, is extremely fertile, and is covered with plantations, and densely peopled. S. of Manilla is the Laguna de Bahia, about 20 m. in length and 10 m. in breadth, the waters of which are conveyed into the Bay of Manilla by a wide and pretty deep stream, the Pasig, flowing through the cap. A few miles further S. is the Laguna de Taal, which communicates with the Senada de Balayan, by the short but deep river Bonbon; it is nearly circular, being about 11 m. in diameter, and contains the island of Taal, in which is a volcano, with two active craters. About 20 m. E. is another volcano; and more to the S., in the peninsula of Camarines, are ten volcanoes, one of which has frequent eruptions: in fact, throughout Luzon and most of the Philippines, the igneous formations have been found in constant connection with the primitive rocks; and there can be no doubt that they form a part of the great volcanic band extending from Kamtschatka, through Japan and Formosa into Borneo, Java, and Sumatra. Gold, iron, and copper have been found in the mountains of Luzon, and rock-salt is so abundant in some parts as to be an article of export. Luzon is separated from Mindoro by the strait of that name, about 5 m. broad, and from Samar by the Embocadero de San Bernardino, the common passage for vessels navigating the Pacific on their way to China.

The Bisayan group, which lies SW. and S. of the great island last mentioned, comprises about eight or nine considerable islands, the most westerly of which is Mindoro, and that most eastward Samar. With the exception of Panar, which is triangular, these islands are generally long and narrow; Mindoro, Negros, Samar, and Masbate are very mountainous, and only moderately productive; but Panay and Zebre contain much good level land, and are, on the whole, the most important islands of the Philippine group. The Palawan, the extreme W. island of the Philippines, extends from NE. to SW. about 250 m., with a breadth of not more than one-tenth its length: it is reported to be extremely mountainous; but the greater part is inhabited by savages, and it has been little visited by Europeans. A small portion only at its N. extremity belongs to Spain.

Magindanao, or Mindanao, the largest of the Philippine Islands after Luzon, is of very irregular shape, having a peninsula stretching 150 m. from the main part of the island: length from N. to S. about 320 m.: average breadth, exclusive of the peninsula, 95 m. Dampier and Forest are the principal authorities from whom we derive any knowledge of this still imperfectly known island. In the interior, near the Bay of Illano, is a considerable lake, which, according to Forest, is between 15 and 20 m. in width. The E. coast is mountainous, and numberless hills occur in the W. and S. districts, which are generally well covered with timber; large tracts, however, are found in some parts quite destitute of trees, and covered, like the savannahs of America, with long, rank grass. So large an island must necessarily have large rivers; but only two of them are known, one on the N. side, flowing into the Bay of Butnan, and another, called the Pelangy, flowing westward into the Bay of Illano, opposite the island of Bunwat. The Spanish settlements, chiefly on the N. side, form two provinces in the capitanata of the Philippines. The interior is inhabited by *Horaforas*, who are treated as slaves by the Malays occupying all the S. coast; they acknowledge the supremacy of a native sultan.

The *climate* of the Philippines, owing to their extent, is more variable than in the other groups of islands lying so near the equator. In and about Manilla, the district usually visited by Europeans, the mean temperature of the hot season (from August to October) may average about 82°, and that of the cold season, usually preceding the rains, about 70° Fah. The year, as in other tropical countries, is divided into a wet and dry season, here depending on the monsoons: the former lasts from May till the commencement of November, and the latter during the rest of the year. In the SW. monsoon immense quantities of water fall, and the rain frequently lasts for twelve or fourteen days without intermission. A large part of Luzon is within the region of the *typhoons*, which are as formidable as the tornadoes of the W. Indies: they last from May to December, but seldom continue more than six or eight hours at a time. In Luzon the inhabs. suffer from agues and dysentery, in consequence of the great extent of marshy and low grounds inundated during the rainy months, and exhaling

Digitized by Google

pestilential vapours during the rest of the year. (Meyen, Reise um die Erde, ii. 281.)

The *agricultural products* of the Philippine Islands include rice, millet, and maize, sugar, indigo, hemp, tobacco, coffee, and cotton, with a great variety of other articles of inferior importance; but with the modes of culture we are little acquainted, though the Chinese implements are generally used in husbandry. Rice is the chief support of the pop., and hence is raised in large quantities throughout the group, the marshy nature of the country in many parts being favourable to its cultivation. In other districts, however, upland rice is cultivated. The sugar-cane is raised on the great plain of Pampanza and in the island of Panay: the mode of extracting the sugar is defective, but the sugar is excellent; its culture is also rapidly extending, and it now forms by far the most important article of export from the Philippines. Tobacco grows well, and might be produced on a very extensive scale; but its growth is limited, from the manufacture of cigars, in which form alone tobacco is exported, being a government monopoly. Indigo, also, is pretty extensively cultivated, but is inferior in quality to that of Bengal. Sapan wood constitutes the chief timber of the hilly districts, and is exported in large quantities to China. The coffee-plant was introduced by the Spaniards at the close of the last century, and grows wild on the W. side of Luzon, though not in the other islands. The coffee exported from Manilla is almost wholly procured from these wild plants, and is alleged to be almost equal to that of Bourbon or the Mauritius. The banana is found on nearly all the islands, and hemp is produced very abundantly in the neighbourhood of Manilla, as well as in Panay and Zebre, furnishing materials both for cordage and a strong coarse cloth woven by the Malays. Excellent sago grows in most parts of Luzon, and the cocoa-nut, which was introduced from Guatemala, is very abundant, and superior in quality even to that of Peru. The shrub-cotton (*Gossypium herbaceum*) thrives well; but, owing to some imperfection in the mode of breaking the pod, the cotton is of inferior quality, and little is exported. Cinnamon, the betel-pepper, and the clove-tree are found wild in many of the islands, and the bread-fruit, mango, and shaddock are raised very abundantly and with little labour. The other fruit-trees are few in number and of very indifferent quality. The mountains produce excellent timber for building both houses and ships; and the bamboos, used in the construction of the houses of the Malays, are very long, some being as thick as a man's thigh. The *fauna* of the Philippines comprises buffaloes of uncommon size and strength, a small, but hardy, breed of horses, introduced by the Spaniards, goats, pigs, and a few sheep, with immense numbers of ducks and fowls both wild and domestic. Land-tortoises are plentiful in most of the islands, and their shells constitute an important article among the exports. There are no beasts of prey; but caymans are found in most of the rivers and lakes, and are particularly numerous in the Laguna de Bahia. Among the birds may be noticed the swallows which supply the edible nests. Fish abound on the coasts, and the native fishermen are equally expert with the other islanders of the E. Archipelago. Pearl-oysters also are found in large quantities, and the shells are exported to China. The sea-slug, or *holothuria*, is also an important article of commerce.

Manufactures are of very little importance. The plaiting of straw and chips of wood into hats, cigar-cases and matting is carried on pretty extensively, and the hats are highly prized by the Spaniards. Domestic weaving occupies most of the females; and cotton cloth was, till recently, an article of export to Mexico. Considerable quantities of earthenware are made in Luzon, but of very inferior quality to that of China. The manufacture of cigars is a government monopoly; the royal manufactory at Manilla employs about 2,000 persons, two-thirds of whom are females.

Commerce.—Considering the great fertility and varied productions of the Philippines, and their peculiarly favourable situation for carrying on commerce, the trade of the Philippine Islands is very limited. The principal exports are sugar, hemp, tobacco, gum, and coffee; and the principal imports, cotton and other manufactured goods. The total value of the different articles of export to the United Kingdom, in each of the years 1862 and 1863, was as follows:—

Exports to the United Kingdom	1862	1863
	£	£
Cassia Lignea	2,598	—
Coffee	13,460	18,693
Copper, Part Wrought	—	1,116
Gum, Copal	575	20,606
„ Mastic	5,144	3,976
Hemp, Rough or Undressed	225,414	418,316
Hides, not Tanned	2,220	2,749
Indigo	73,961	11,638
Mother-of-Pearl Shells, Rough	7,606	10,150
Sapan Wood	1,383	5,585
Sugar, Unrefined	334,406	837,418
Tobacco, Manufactured, and Cigars	31,749	34,983
Tortoiseshell or Turtleshell, Unmanufactured	4,679	1,342
All other Articles	5,671	25,626
Total	708,866	1,392,198

The imports of British and Irish produce and manufactures from the United Kingdom, in the same two years, were as follows:—

Imports from the United Kingdom	1862	1863
	£	£
Apparel and Haberdashery	4,988	3,653
Coals, Cinders, and Culm	11,575	3,289
Copper, Wrought and Unwrought	4,429	9,184
Cotton Yarn	8,254	10,930
Cottons, entered by the Yard	294,510	351,091
„ „ at Value	12,965	9,130
Earthenware and Porcelain	8,515	8,174
Glass Manufactures	4,506	3,100
Hardwares and Cutlery, unenumerated	7,922	13,784
Iron, Wrought and Unwrought	11,333	23,548
Leather, Wrought and Unwrought	1,068	1,256
Linens, entered by the Yard	16,263	35,394
Machinery: Steam Engines	2,752	11,621
All other Sorts	17,488	14,455
Umbrellas and Parasols	11,248	5,163
Woollens, entered by the Yard, including those formerly entered by the Piece	7,830	11,304
All other Articles	32,758	41,787
Total	458,404	556,863

The foreign trade of the islands centres almost entirely in Manilla. It is, in fact, the only port in the Philippines to which either Spanish ships to or from Europe and foreign vessels generally are allowed to trade; but Spanish vessels trading with China and Singapore may proceed to the outports of Pangasinau, Ylvers, and other places, to take on board their outward-bound cargoes.

The *population* of the Philippines is extremely mixed; and, independently of foreign settlers, the natives consist of a great number of distinct

Digitized by Google

tribes, partly of Malay, partly of Papuan origin, and speaking several distinct languages or dialects. Some of the natives still adhere to the polytheism they professed before the arrival of the Spaniards; but a large proportion have been converted to the Catholic faith, which, indeed, is the common bond between them and their new masters, and the principal means by which the latter have so long been able to maintain their ascendancy. The natives are said to be the most active, bold, and energetic of any belonging to the E. Archipelago. 'These people,' says M. de la Pérouse, 'appear in no respect inferior to those of Europe. They cultivate the earth like men of understanding; are carpenters, joiners, smiths, goldsmiths, weavers, masons, &c. I have walked through their villages, and found them kind, hospitable, and communicative; and though the Spaniards speak of them and treat them with contempt, I perceived that the vices with which they are charged, ought rather to be imputed to the colonial government.' (Voyage, chap. 15.) The people here described, however, are the Malays, who have pretty generally acknowledged the supremacy of the Spaniards, by whom they are treated as free subjects, and allowed to be proprietors of land: the Papuans, who chiefly occupy the higher parts of the country and less frequented islands, are miserable savages, incapable of civilisation, and avoiding all communication with foreigners. The rest of the population comprises European and Creole Spaniards, Spanish and Indian mestizos, Mohammedans from the E. Indies, and Chinese. The Spaniards, however, do not exceed 4,000 or 5,000.

The *seat of government* is at Manilla, the residence of the captain-general of the Philippines; but there are lieutenant-governors in the most important of the other islands, and alcaldes in each of the provs., which also are subdivided into *pueblos*, having their separate intendants. The revenues of the Philippines are principally derived from *ad valorem* duties on imports and exports, and from a capitation tax, and the tobacco monopoly. Foreign commodities, imported in foreign vessels, pay 14 per cent., and in national vessels from 7 to 9 per cent.; but there are some exceptions, and wines of all sorts, except Champagne, pay from 40 to 50 per cent., according as they are brought in native or foreign bottoms. Spanish products, imported by Spanish vessels, pay 3, and by foreign vessels, 8, per cent. Exports (in which are comprised commodities produced in the island, and imports from foreign countries for consumption) pay from 1 to 1½ per cent. *ad valorem*, by Spanish, but from 2 to 3 by foreign ships. Tobacco, however, and hempen rope, made at Manilla, may be exported free of duty. Spaniards may export rice free of duty, but foreigners are charged 4½ per cent. The capitation tax, or annual tribute, is charged at certain rates on all the inhabs. except European mestizos. The Chinese, who constitute the chief portion of the shopkeepers, traders, mechanics, coolies, and household servants are divided into four classes, paying rates, varying from 12 doll. 6 rs. to 120 doll. 6 rs., to which they are subject from the age of 16 to 60: but no Chinese is allowed to settle on the islands after the age of 40 years. Chinese and Indian mestizos pay 1 doll. 3 rs. annually, from the time of puberty till death, and Indians of both sexes pay 5 rs. 6 gr. each, during the same period. The army consists of about 7,000 men, of whom only 700 are Spaniards, and the rest Malays. The cavalry are chiefly European; but the Malays are said to be good soldiers, and occupy most of the fortresses in Luzon.

The Philippines were discovered by Magellan in 1521, but were not claimed by the Spanish till 1565, soon after which Manilla was constituted the cap. of their possessions in this part of the world. The islands received their present appellation in honour of Philip II., when king of Spain. The Dutch and Chinese tried to make settlements here in the 17th century, though without success, owing to the determined and jealous opposition of the Spaniards. In 1762, Manilla was taken by the English, who gave it back to Spain in 1764; since which they have held it without interruption. The government, however, is inefficient and unable to protect the islanders from the ravages of the Sooloo and other pirates, who capture vessels, plunder villages, massacre or enslave the inhabs., and commit other enormities with impunity.

PIACENZA (an. *Placentia*), a city of N. Italy, cap. prov. of its own name, on the Emilian Way, near the Po, where it is joined by the Trebbia, 37 miles WNW. Parma, and 37 miles SE. Milan, on the railway from Parma to Milan. Pop. 30,967 in 1862. The city is of an oblong form, surrounded with ramparts, now partly converted into public promenades. Its streets are wide and regular, especially the principal, called the *Stradone*, which is one of the handsomest in Italy; but they are dull and deserted. The houses are built of brick. The principal square is mostly surrounded with old and mean buildings, but includes the town house, with the prison, an antique structure, with fine Gothic tracery-work; the governor's palace, an old building, with new front, raised by the French; and a large church: in the centre of the square are the bronze equestrian statues of Alexander Farnese and his son. The Farnese palace, an unfinished edifice of singular architecture, designed by Vignola, is converted into a barrack; its walls were formerly adorned with the works of Raphael, Correggio, and Parmegiano; but these were mostly removed when the last Duke of Parma changed his brick palace of Piacenza for the throne of Naples. Piacenza abounds with churches. The cathedral is a heavy-looking building of the 12th century; but its cupola is ornamented with fine frescoes by Guercino and Franceschini; and it has an altar-piece of high merit by Procaccino, with other paintings by that artist, the Caracci, and Parmegiano. Many of the other churches, also, boast of fine paintings; but that formerly belonging to the Augustine convent, an elegant structure by Vignola, has been converted into a granary. The city has a theatre, a public library with 30,000 vols., and two orphan asylums. Piacenza is a bishop's see, the seat of the high court of appeal, two inferior tribunals, an episcopal seminary, with about 200 students, schools of the fine arts, architecture, and a high school for young ladies. It has a few manufactures of silk twist, woollen stuffs, stockings, hats, and earthenware; but its chief trade is in agricultural produce. It has a large fair in April.

When colonised by the Romans, *anno* B. C. 219, Placentia was the most important and strongest city in Cispadine Gaul; and it afforded a secure retreat to the Romans, after the unfortunate battles of the Ticinus and Trebbia. Its fine amphitheatre, beyond the walls, was destroyed in the war between Otho and Vitellius. Piacenza, with its territory, was taken possession of by Pope Julius II., and given by Paul III. to L. Farnese. It has since mostly followed the fortunes of Parma. Pope Gregory X., Cardinal Alberoni, Pallavicini, and Landi were among the remarkable natives of this city.

PIAZZA, a town of Italy, island of Sicily, near its centre, prov. Caltanisetta, 18 m. ESE. city of that name. Pop. 14,551 in 1862. The city is built upon an isolated eminence. There is nothing

Digitized by Google

remarkable in its buildings; but it is admired for the richness of its territory, and the great beauty of the contiguous country. The *chiesa madre*, a good church, several convents, and a college, are the principal edifices. It is a bishop's see; but, from the little attention paid to it by classical writers, and the absence of any vestige of antiquity, it was evidently a place of consequence in early times.

PICARDY, one of the former provs. of France, now subdivided among the dépts. Aisne, Somme, Pas-de-Calais, Ardennes, and Oise.

PICKERING, a market town and par. of England, N. riding co. York, W. div. of wap. Pickering-Lythe, on the S. side of the Egton Moors, 18 m. SW. Whitby, and 23 m. NE. York. Area of par., including 5 townships, 32,760 acres. Pop. of township, 3,399 in 1861. The town, situated on a gentle eminence near a small tributary of the Derwent, is old and straggling. Near its W. extremity are the ruins of a castle, in which Richard II. was confined after his deposition, and prior to his final removal to Pontefract. The church is a fine old building, with a lofty spire: the living a vicarage in the gift of the dean of York. The Wesleyan Methodists, Independents, and other dissenters have places of worship; and there are various Sunday schools and a well-endowed charity school for 150 children of both sexes. The town sent two mems. to the H. of C. in 23 Edw. I.; but the privilege was discontinued in the same reign, and has not been restored. It belongs to the duchy of Lancaster, and comprises in its jurisdiction several neighbouring villages, the whole forming what is called 'the Honour of Pickering.' A railway, 24 m. in length, connects the town with Whitby. A manor-court is held here at Easter and Michaelmas, for the recovery of debts under 40s., and petty sessions are held on alternate Mondays. Markets on Monday: fairs the Mondays before Feb. 14, July 6, and Oct. 11, chiefly for cattle.

PIÉRRE (ST.). See MARTINIQUE.

PILLAU, a sea-port town of the Prussian States, prov. E. Prussia, at the point of a tongue of land, on the N. side of the opening from the Baltic into the large maritime inlet, called the Frische Haff. Pop. 3,677 in 1861, exclusive of garrison of 775 men. Pillau has a good port, but the water is rather shallow, not exceeding 11 or 12 ft. in depth, so that vessels of large burden must anchor outside the bar. A lighthouse, having the lantern elevated 90 ft. above the level of the sea, has been erected on the S. side of the town, contiguous to the port; lat. 54° 38′ 4″ N., long. 19° 54′ E. Pillau is properly the sea-port of Konigsberg and Elbing, and is, in consequence, largely frequented by shipping.

PILSEN, a town of Bohemia, cap. circ. Pilsen, on the Beraun, a tributary of the Elbe; 53 m. SW. by W. Prague, on the railway from Prague to Nuremberg. Pop. 14,720 in 1857. Pilsen is one of the best built towns in the kingdom, and has a fine Gothic par. church and town-hall, a gymnasium, military and other schools. Its manufactures of woollen goods are flourishing, and it has others of Morocco leather, iron and horn wares, and alum. Being on the high route from Prague to S. and Central Germany, it has a considerable transit trade; and a large annual fair is also held, attended by traders from every part of Bohemia.

PINEROLO (Fr. *Pignerol*), a town of North Italy, prov. Turin, on the Clusone, near the foot of the Alps, 21 m. SW. Turin. Pop. 15,464 in 1862. The town was formerly a place of strength; but, on its cession to Savoy in 1713, its fortifications were blown up by the French, and at present it is surrounded only by a slight wall. It is neither regularly nor well built, but contains a spacious place of arms, with a handsome hospital and cavalry barracks. It has a fine cathedral, and numerous convents. The manufactures comprise coarse woollens, silk, twist, paper, and leather; and the inhabs. have a considerable trade in these articles, and in corn, wine, spirits, and fire-wood.

PISA (an. *Pisæ*), a famous city of Central Italy, the cap. of one of its most celebrated republics, and now the cap. of the prov. of its own name, in a fertile, though rather marshy, plain on the Arno, about 8 m. from its mouth; 13 m. NNE. Leghorn, 50 m. W. Florence, and 12 m. SW. Lucca, on the railway from Leghorn to Florence. Pop. 49,181 in 1862. The walls of the city are nearly 5 m. in circuit. In the days of its prosperity it was celebrated for the strength of its fortifications, its patrician towers, its profusion of marble, and its grave magnificence; but it is now only 'the shell of a great city.' (Addison.) Its ancient gravity has degenerated into dulness; its towers, however, though no longer a mark of nobility, may be traced in its modernised houses; and it can still boast of many marble edifices, and of one of the finest marble bridges in Europe. Its streets, though crooked, are wide, and paved, as in Florence, with large flag stones; the river is embanked with stone quays; and a street, the *Lung-Arno*, which extends along both its banks, has a majestic appearance. Some of the houses have curious old fronts, and one street is wholly bordered with arcades. In a large grass-grown square, at the N. angle of the city, are 4 remarkable buildings—the cathedral, baptistery, leaning tower, and *Campo Santo*, all built of the same marble, all varieties of the same architecture, and all venerable with years. The cathedral is an edifice of the 11th century, and principally interesting as a specimen of the style then prevalent in Italy. Its length is 297 ft., breadth 108 ft.; and it has a front 127 ft. in height. Internally it is divided into 5 aisles by 68 insulated columns of Corinthian or Composite architecture, and 4 piers support an elliptical cupola. There are some beautiful altars, 3 magnificent bronze doors with sculptures in relief by John of Bologna, and many fine paintings and bass-reliefs by some of the first Italian masters. Among the 80 other churches are many which can boast of rare works of art. The baptistery, opposite the cathedral, was built between 1152 and 1154, when Pisa was so populous and rich, that a voluntary contribution of one florin from each family is said to have sufficed to pay for its erection. This building is an immense polygon, above 160 ft. in diameter and 176 in height, surmounted by a cupola and a cone terminated by a figure of St. John the Baptist. Nearly the whole of the exterior is of marble, and the interior is handsome; but the building is not altogether well proportioned. The famous *Campanile*, or Leaning Tower, is an edifice of little actual beauty, but rendered extraordinary by its inclination from the perpendicular. It was begun about 1174, but not finished till the middle of the 14th century: it consists of 2 concentric walls, each 2 ft. thick, the diameter of the circular well in the centre being 22 ft.: it is 8 stories, or 190 ft. in height, with outside galleries projecting 7 ft. The topmost story overhangs the base on one side about 15 ft.; and to a spectator looking down from the top, the effect is terrific; though, as the centre of gravity is still 10 ft. within the base, it is perfectly safe. The view from the summit is alike extensive and beautiful. It has been supposed by some that the inclination is not acci-

Digitized by Google

dental but intentional, and that it was so constructed originally; but the more probable opinion seems to be, that it is a consequence of the sinking of the foundation. The observatory and baptistery have also a slight inclination, which is, no doubt, owing to the same cause.

The *Campo Santo*, or cemetery, is the most beautiful edifice at Pisa, and unique in its kind. It is an oblong or rhomboidal court, 383 ft. in length, by 127 ft. in breadth, surrounded by arcades of white marble, adorned with ancient Etruscan, Greek, and Roman bass-reliefs, busts, and other sculptures; and the walls covered with fresco-paintings, by the earliest Italian masters. In its centre is an enormous mound of earth, said to have been brought thither from Palestine during the Crusades, and formerly used as a burial ground. Pisa has a grand ducal residence, and several other palaces, which, with the nobilities' club-house and bank, are fine buildings: the 3 bridges are handsome; and the hospitals, theatre, and modern aqueduct, 4 m. in length, are well adapted to their purposes. Various remains of antiquity exist, as those of the aqueduct of Caldacolli, of the *hypocaustum*, supposed to have been constructed by Nero, but especially a *sudatorium*, or vapour-bath, near the Lucca gate. About 3½ m. distant, on the Lucca road, are the *Bagni di Pisa*, supposed to be the baths mentioned by Strabo and Pliny, and still frequented by numerous visitors.

Pisa has a university, formerly among the most celebrated in Italy, and remarkable for its tolerance; its degrees, except in divinity and canon law, being attainable by persons of all creeds. Its library comprises 55,000 vols.; and attached to it are the Ferdinand college, a fine botanic garden, cabinet of natural history, chemical laboratory, and observatory. This university was one of the first to revive the study of the civil law; though there is no good foundation for the common story that this revival was a consequence of the Pisans having found a copy of the Pandects among the spoils of Amalfi, sacked by them in 1140. The university has had many illustrious names in the roll of her professors, including, among others, Galileo, Toricelli, Redi, Malpighi, Thomas Dempster, Borelli, Castelli, and Gronovius. Besides the university, Pisa has an episcopal seminary, with about 80 students, several conventual female schools, normal and Lancastrian schools; and is an archbishop's see. Its manufactures, which are unimportant, consist chiefly of soap, white lead, vitriol, glass, and a few other articles; and its trade has sunk in proportion to the rise of that of Leghorn. The city is connected by navigable canals both with Leghorn and the Serchio; but it is a curious fact that no vestige can now be found of its ancient port or roadstead at the mouth of the river, though, in the 13th century, it accommodated large fleets. This singular result is supposed to have been brought about by a change in the course and embouchure of the Arno.

Most writers attribute the foundation of this city to colonists from Pisa in the Peloponnesus soon after the Trojan war.

> ——— 'Alphææ ab origine Pisæ,
> Urbs Etrusca solo.' Æneid, lib. x. v. 179.

It became a Roman colony, and its port was, in the time of Strabo, an important naval station. It did not, however, attain to any great distinction till the 10th century, when it took the lead among the commercial republics of Italy. In the 11th century, its fleet of galleys maintained a superiority in the Mediterranean, commanding the coasts of Sicily, Sardinia, Corsica, and Barbary, and assisting the French in the Crusades. But, in the 13th century, a struggle commenced with Genoa, which, after many vicissitudes, ended in the total ruin of the Pisans. The latter were defeated near the island of Meloria, in 1284, in a great naval engagement by the Genoese, with the loss of the greater part of their fleet, and above 16,000 men killed and taken prisoners. Pisa subsequently became the prey of various petty tyrants, and was finally united to Florence in 1406.

Galileo, so celebrated for his discoveries in astronomy and natural philosophy, and for the persecution to which they exposed him, was a native of Pisa. He was born on the 15th February, 1564.

PISTOJA (an. *Pistoria*), a city of Central Italy, prov. Florence, on the Ombrone, a tributary of the Arno, at the foot of the Apennines, 20 m. NW. Florence, on the railway from Florence to Leghorn. Pop. 11,887 in 1862. The city is between 2 and 3 m. in circuit; is surrounded by old walls said to have been originally constructed by Desiderius, the last of the Lombard kings, and is further defended by a citadel built in 1252. It is clean, handsome, and well built, with unusually broad streets, and many curious and splendid edifices; but, like many other Italian towns, is dull, monotonous, and silent. Its cathedral is in the same style of architecture as that of Pisa and that of Lucca, but inferior to either: it has, however, some interesting monuments. The baptistery, constructed by Andrea Pisano, in 1337, is a small and handsome octagonal Gothic edifice. Several of the inferior churches are remarkable for their style of architecture or works of art; and the court-house is a fine old building. Instead of the suppressed Jesuits' college, there is a seminary for priests; and a large hospital is kept in good order. Pistoja has a well-supplied market, a museum, two small public libraries, a large theatre, assembly rooms, and a race-ground. Provisions are cheap and good; the climate is cool and healthy; and the city is the residence of many noble and respectable families. The manufactures, which are on a small scale, include silk twist, straw hats, paper, musket barrels, cutlery, nails, and iron-wire; and near the city are some tolerably extensive iron-works.

Pistoja is with Prato a bishop's see, and has an episcopal college, a superior private lyceum, with normal, girls', Lancastrian, and various inferior schools. In the middle ages it was the cap. of a republic, which became subject to Florence about the same time as Pisa.

PITCAIRN'S ISLAND. See POLYNESIA.

PITTENWEEM, a royal and parl. bor. and seaport of Scotland, co. Fife, on the N. shores of the Frith of Forth, 26½ m. NE. by N. Edinburgh. Pop. 1,671 in 1861. It was created a bor. in 1537, and bears the marks of antiquity and decay. In addition to the parish church, the Episcopalians and the relief Synod have each a chapel. Pittenweem has a small harbour; but the only business connected with it is that of fishing to a limited extent. Here are the remains of a monastery of Augustine Friars. Dr. Douglas, bishop of Salisbury,

> 'The scourge of impostors, the terror of quacks,'

was born here in 1721.

Pittenweem unites with St. Andrew's, the two Anstruthers, Crail, Cupar, and Kilrenny, in sending 1 mem. to the H. of C. Registered electors in the bor., 78 in 1865. Number of councillors, 24.

PITTSBURG, a city of the U. States of N. America, state Pennsylvania, on a triangular piece of land between the Alleghany and Monongahela, where those rivers meet to form the Ohio, 264 m. W. by N. Philadelphia, and 258 m. NE. Cincin-

Digitized by Google

nati. Pop. of Pittsburg proper, 49,220 in 1860; but if including the town of Alleghany, N. of the river of that name, the rising bor. of Birmingham, S. of the Monongahela, and other suburbs, the pop. amounted to 120,000 in 1866. The city is of a triangular shape, compactly and in some parts handsomely built, though the smoke of the different works has given to the houses a blackened and rather gloomy appearance: water is supplied from the Alleghany by means of a powerful steam engine. The public buildings include numerous churches, an exchange, mansion-house, state penitentiary, different banking establishments, the western university of Pennsylvania, the Alleghany arsenal (occupying, with its magazines and barracks, an area of 31 acres), and buildings belonging to the Pittsburg high school, two theological academies, and a public library.

Pittsburg is admirably situated for manufactures and commerce: it has an all but unlimited command of inland navigation, and is connected not only with New Orleans and the various ports on the Mississippi, and its tributary streams, but also, by means of canals and railways, with the Great Lakes and with Philadelphia, and other parts on the E. coast of the Union. And in addition to its advantageous geographical position, it has the command of inexhaustible supplies of coal and iron. In consequence it has become a principal seat of American manufactures, especially of those of hardware and glass. There are about 20 rolling mills in Pittsburg, with a great many foundries, consuming about 100,000 tons a year of pig iron produced in the vicinity. Here, also, are very extensive glass works, with works for the production of steam-engines and other descriptions of machinery, cotton factories, nail works, and earthenware works. Though Pittsburg be above 2,000 m. from the sea, ship-building, especially of steamers for the navigation of the Ohio, Mississippi, and their connected streams, is carried on upon a very large scale; and most part of the machinery used in the steamers built at New Orleans, and other ports in the valley of the Mississippi, is produced here. It may, also, be affirmed, that, notwithstanding their rapid increase, the manufactures and commerce of Pittsburg are yet only in their infancy, and that they must necessarily continue to increase with the increasing wealth and population of the vast countries of which the town is a principal workshop and emporium. The inhabs., who are a mixture of all nations, Germans, Irish, English, Scotch, and French, are industrious, frugal, economical, and without show. But here, as elsewhere, the American spirit of enterprise predominates.

Pittsburg derives its name from Fort Pitt, a fortress constructed on the site of the city by the British previously to 1760, and round which a town began, in the course of time, to grow up. But it did not make much progress till 1795, since which it has steadily and rapidly advanced in industry, wealth, and population. In 1755, a British and Colonial force, under General Braddock, sustained a total defeat on the ground now occupied by this city.

PLASENCIA, a fortified city of Spain, in Estremadura, on a peninsula almost surrounded by the Jertes, a trib. of the Tagus (crossed here by three bridges), 102 m. N. by E. Badajoz, and 120 m. W. by S. Madrid. Pop. 6,844 in 1857. The city stands in a plain, encircled N. and E. by high mountains, is surrounded by strong walls, entered by six gates, and has several pretty wide, level, and well-paved streets, with 7 par. churches, a cathedral, an episcopal palace, 5 hospitals, a fine old aqueduct of 80 arches, which conveys water to the town, and a private collection of antiquities. The cathedral, a modern Gothic structure, is not completed: the chapter includes a bishop, 8 dignitaries, and 24 canons. The manufactures comprise leather, hats, woollen, linen, and hempen cloths, and the surrounding plain, or *puerta*, is extremely fertile, producing large quantities of grain, fruits, and oil.

Plasencia, though not the *Ambracia* of the Romans, is proved, by the numerous antiquities found in it, to be of remote origin. The present city, however, was built near the end of the 12th century, by Alphonso IX. of Castile. It was formerly possessed by its own lords, and gave title to a duchy, but, in 1448, it was united to the crown of Castile.

PLASSEY, a village of Bengal, on the Hooghly river, 80 m. N. Calcutta, and 30 m. S. Moorshedabad. This village will be ever memorable in Indian history, for its having been the scene of the great victory gained by Lord (then Colonel) Clive, on the 23d of June, 1757, over Suraja Dowla, soubahdar of Bengal. Clive's army consisted of only 900 Europeans, 2,100 sepoys, and 100 Topasses; yet, with this small force, he did not hesitate to attack the soubahdar's army, of 50,000 foot and 18,000 horse, supported by a formidable train of artillery. Clive knew that the native troops had no confidence in their general, and, in fact, they instantly gave way, so that the victory was at once complete, and easily won. The result of this contest threw Bengal into the hands of the East India Company, and laid the foundations of the British empire in India.

PLATA, LA (REPUBLIC OF), or ARGENTINE REPUBLIC, an independent state, or rather confederation of states, in S. America, extending between the 22nd and 41st degs. of S. lat. and the 54th and 72d of W. long., having N. Bolivia; E. Paraguay, Brazil, and the Banda Oriental, from all which it is separated by the Paraguay, Parana, and Uruguay rivers; S. the Atlantic Ocean and Patagonia; and W. Chili and Bolivia. The area of the republic is estimated at 726,000 sq. m. The population, after a rough enumeration of the year 1855, is divided as follows between the fourteen provinces:—

Provinces	Population
Littoral or Rivernie—	
Buenos-Ayres	350,000
Santa-Fé	40,000
Entre Rios	80,000
Corrientes	85,000
Provinces contiguous to the Andes—	
Rioja	34,500
Catamarca	50,000
San Juan	62,000
Mendoza	60,000
Central Provinces—	
Cordoba	130,000
San Luis	32,000
Santiago	60,000
Incuman	88,500
Northern—	
Salta	66,600
Injuy	33,200
Total	1,171,800

On the W. this territory is bounded by the great Cordillera of the Andes; and the NW. prov. of Salta is almost wholly mountainous, as are extensive portions of the adjacent provs. of Catamarca and Tucuman. Some points of the Despoblado chain in Salta rise probably to the height of 13,000 ft.; and in Cordova are isolated chains, which anywhere but in the neighbourhood of the Andes would be called mountains. Still five-

Digitized by Google

sixths of the country consist of plains, several of which are of vast extent. But notwithstanding its freedom from mountains, and the number and magnitude of its rivers, it is far from being a fertile region, and a large proportion of its surface seems condemned to perpetual sterility. In the N. is the S. portion of the immense tract known by the name of the *Gran Chaco*, a vast plain, occupying the whole triangular space between Bolivia on the N. and the great rivers Paraguay on the E., and Salado on the W. This immense plain, which covers from 110,000 to 120,000 sq. m., is in the N. covered with extensive forests; but its more S. portion, between the Vermejo and Salado, is a sandy, arid, and uninhabitable desert. This, also, is the character of the extensive tract between the Salado and the Rio Dolce; and W. from the latter, as far as the Sierra Velasco, in about the 68th deg. of W. long., extends the great salt desert of Salinas, in great part covered with saline efflorescence, and extremely hot. The great southern plain, or that which extends over the whole country S. of the 33rd deg. of lat., is, fortunately, of a very different character. This vast tract, which includes an area of above 300,000 sq. m., is called the *Pampas*. It may, taking its vast size into account, be regarded almost as a dead level, its slope towards the E. being gradual and imperceptible. It is interspersed with innumerable lakes, but these, as well as most of the rivers by which they are fed, are brackish, the soil through which they flow being strongly impregnated with salt. Perfectly fresh and potable water is, however, found at the depth of from 20 to 50 ft. Substantially, however, the Pampas are divided into several regions, differing in climate and produce, though under the same lat. 'On leaving Buenos Ayres,' says a traveller (Head's Journeys across the Pampas), 'the first of these regions is covered for 180 m. with clover and thistles alternately; the 2nd region, which extends for 450 m., produces long grass; and the 3rd, which reaches the base of the Cordillera, is a grove of low trees and shrubs. The 2nd and 3rd of these regions have nearly the same appearance throughout the year, for the trees and shrubs are evergreens, and the immense plain of grass only changes its colour from green to brown; but the 1st region varies with the four seasons of the year in a most extraordinary manner. In winter the leaves of the thistles are large and luxuriant, and the whole surface of the country has the rough appearance of a turnip field. The clover in this season is extremely rich and strong; and the sight of the wild cattle grazing in full liberty on such pasture is very beautiful. In spring, the clover has vanished, the leaves of the thistles have extended along the ground, and the country still looks like a rough crop of turnips. In less than a month the whole region becomes a luxuriant wood of enormous thistles, which have suddenly shot up to a height of 10 or 11 ft., and are all in full bloom. The path is hemmed in on both sides; the view is comparatively obstructed; not an animal is to be seen, and the stems of the thistles are so close to each other, and so strong, that, independent of the prickles with which they are armed, they form an impenetrable barrier. The sudden growth of these plants is quite astonishing; and though it would be an unusual misfortune in military history, yet it is really possible that an invading army, unacquainted with the country, might be imprisoned by these thistles before it has had time to escape from them. The summer is not over before the scene undergoes another rapid change: the thistles suddenly lose their sap and verdure, their heads droop, the leaves shrink and fade, the stems become black and dead, and they remain rattling with the breeze one against another until the violence of the pampero, or hurricane, levels them with the ground, where they rapidly decompose and disappear; the clover rushes up, and the scene is again verdant. The vast region of grass in the Pampas for 450 m. is without a weed, and the region of wood is equally extraordinary. The trees are not crowded, but in their growth such beautiful order is observed, that one may gallop between them in every direction. The whole country is in such beautiful order, that if cities and millions of inhabitants could suddenly be planted at proper intervals and situations, the people would have nothing to do but to drive out their cattle to graze, and, without any previous preparation, to plough whatever quantity of ground their wants may require.

'The climate of the Pampas is subject to a great difference of temperature in winter and summer, though the changes are very regular. The winter is about as cold as our month of November, and the ground at sunrise is always covered with white frost, but the ice is seldom more than one-tenth of an inch thick. In summer the sun is oppressively hot. The difference, however, between the atmosphere of Mendoza, San Luis, and Buenos Ayres, which are all nearly under the same lat., is very great: in the two former, or in the regions of wood and grass, the air is extremely dry; there is no dew at night; in the hottest weather there is apparently very little perspiration, and the dead animals lie on the plain dried up in their skins. But in the prov. of Buenos Ayres, or in the region of thistles and clover, vegetation clearly announces the humidity of the climate, and the dead animals on the plain are in a rapid state of putrefaction. On arriving at Buenos Ayres, the walls of the houses are so damp that it is cheerless to enter them; and sugar, as also all deliquescent salts, are there found nearly dissolved. This dampness, however, does not appear to be unhealthy. The S. part of the Pampas is inhabited by Indians, who have no fixed abode, but wander from place to place as the herbage around them becomes consumed by their cattle. The N. part and the rest of the provs. of La Plata are inhabited by a few straggling individuals, and a few small groups of people, who live together only because they were born together. The travelling across the Pampas is really a very astonishing effort. The country has no road but a track which is constantly changed. The huts, termed posts, are at different distances, but, upon an average, about 20 m. from each other; and, in travelling with carriages, it is necessary to send a man before to request the *gauchos* to collect their horses. The country is intersected with streams, rivulets, and rivers, with *pantanos* (marshes), &c., through which it is absolutely necessary to drive. In one instance, the carriage, strange as it may seem, goes through a lake, which of course is not deep. The banks of the rivulets are often very precipitous, and I constantly remarked that we drove over and through places which, in Europe, any military officer would, I believe, without hesitation, report as impassable. The most independent way of travelling is, however, on horseback, without baggage, and without an attendant. In this case the traveller has to saddle his own horse, and to sleep at night upon the ground on his saddle; and as he is unable to carry any provisions, he must throw himself completely on the feeble resources of the country, and live on little else than beef and water.'

Many of the minor plains are of a very different

Digitized by Google

character from either this or the Gran Chaco; and some, as those of Tucuman, yield corn and maize, rice, tobacco, and the sugar-cane, in the greatest abundance. The provs. of Cordova and Salta are also in parts very fertile. In general, the NW. provs. are the most productive of grain, while the E. provinces, or those between the Parana and the Uruguay, and the SE. provinces, abound most in cattle, and furnish the greater portion of the exports from Buenos Ayres.

The Argentine Republic, excepting a small portion towards its S. extremity, watered by the Rio Colorado and a few smaller rivers, is wholly comprised in the basin of the Plata. (See next art.) Its vast branches supply the most extensive means of internal communication. Many large rivers water the great plains; but several of these lose themselves in the considerable lakes previously noticed, without finding their way to the sea. The principal of these is the Rio Dolce, which intersects the provinces of Tucuman and Santiago, and falls into the lake *de los Porongos*, or great salt lake, 35 m. in length, by 20 m. in breadth. The largest lagoon is that of Ybera, in Corrientes, which extends over 1,000 sq. m., and supplies four considerable rivers. It is probable that the Parana formerly took its course through this lake: at present no stream runs into it, and it is supposed to derive its waters through some underground drainage.

Geology and Minerals.—The NE. and SW. shores of the Rio de la Plata present the greatest contrast in their geological features. The N. shore is elevated, and, like the islands in the river's bed above Buenos Ayres, composed of granite, gneiss, and clay-slate; while, on the S. side, every trace of rock is entirely lost, and for hundreds of miles inland not even the smallest pebble is to be met with. The whole of the vast level forming the Pampas appears to be one immense bed of alluvial sand, quietly deposited, during the lapse of ages, in what was anciently a gulf of the Atlantic, of which the estuary of the Plata is now the only remaining portion. The same process appears to be at present going on here also: this estuary which, in the 16th century, is reported to have been deep enough for ships of any burden, is gradually silting up, and probably, at some future period, instead of discharging itself by a wide mouth as at present, the Plata will enter the ocean by a delta, like the Amazon, the Ganges, or the Nile. In the alluvium of the Pampas, vast quantities of marine shells, and the remains of the *Megatherium olypoldon* have been found; and, according to Mr. Darwin, its whole area is one wide sepulchre for extinct quadrupeds. (Voyage of the Adventure and Beagle, iii. 155; Parish's Buenos Ayres, 164, 165.)

The precious metals, with copper, lead, and iron, are found in different parts of the country; but, speaking generally, its mineral riches have been very imperfectly explored. Gold and silver have, however, been obtained in considerable quantities, in various districts in the NW. and W. provinces connected with the Andes, especially at Famatina, in Rioja, where the ores of silver are said to be very rich. Humboldt estimated the total value of the gold and silver obtained from mines and washings in the captain-generalship of Buenos Ayres, at the commencement of the present century, at nearly 5,000,000 dolls. a year. Iron is also believed to exist in the Chaco, in extensive veins, intermixed with small proportions of nickel and cobalt; and Sir W. Parish considers it extremely probable that the immense mass of metal presented by him to the British Museum, and considered meteoric, is rather a production of the soil. (Buenos Ayres, 258–263.)

Salt is the most abundant mineral, and exists in a state of efflorescence over the surface of immense tracts, in a multitude of brackish springs and pools, and in mines of rock salt. Epsom and Glauber salts, limestone, gypsum, alum, mineral pitch, and an abundance of sulphur, are to be met with along the Cordillera, besides bituminous shale, with appearances of coal in many places; and there are extensive beds of coal in the extreme SW. angle of the country.

The *vegetable products* in the N. provinces include most of those which flourish between the tropics; while in the S. they are in general similar to those of S. Europe. But even as far S. as Corrientes, cotton, tobacco, rice, sugar cane, indigo, and many other articles of primary importance in the markets of Europe, may be produced to almost any extent; and a large extent of country is extremely well adapted to the culture of wheat, maize, and other grains. Wheat, which, till of late, was little cultivated, has now become an article of export. But the implements and processes of agriculture are still in the rudest state.

The immense tract annually inundated by the Plata, now wholly in a state of nature, might, it is said, be made available for the culture of rice on a most extensive scale. The inhabs. of Arauco, a department of La Rioja, are principally employed in the culture of the vine, and make annually from 8,000 to 10,000 small barrels of a strong sweet wine, which is sent to Cordova and the neighbouring provinces. A good deal of strong and full-bodied wine and brandy is also sent from Mendoza to Buenos Ayres.

The demand for sugar in the inland provs. is not sufficient to induce the country people to attend much to the cane; but tobacco is largely cultivated, and finds a ready sale in the adjacent provs. Catamarca supplies all the surrounding states with cotton of a superior quality, for their domestic manufactures; and exports large quantities of red pepper to Buenos Ayres. The cactus, which feeds the cochineal insect, grows in Santiago, Salta, and elsewhere in the W., and to an unusual size; and from the first-named prov. from 8,000 to 10,000 lbs. a year of cochineal were formerly sent to Chili and Peru. Aloes are equally abundant, and from their macerated fibres the Indians of the Chaco make yarn, ropes, fishing-nets, and a variety of bags and pouches, for which there is always a demand among their more civilised neighbours: these articles are dyed in indelible colours, prepared by the Indians from native plants. The cocoa plant (*Erythroxylon peruvianum*), which, when mixed with lime, forms a stimulant chewed by the Peruvian, as the betel in S. Asia, grows plentifully in Salta. Bonpland found 3 new species of indigo in Corrientes; madder is indigenous in several places; and on one species of shrub a small insect called the *clavillo* is found, which affords a most beautiful green dye. The E. flanks of the Andes, and the banks of the W. affluents of the Paraguay, are covered with dense forests; which are however, for the most part, useless, being at so great a distance from the Plata and sea-ports of the republic. The trees are mostly of the mimosa family; and, from the fruit of the algaroba, mixed with maize, the Indians make cakes; and, by fermentation, produce their *chica*, a strong intoxicating spirit, in very general use. The *quinquina*, or Peruvian bark tree, various palms, and the *yerba-maté*, or Paraguay tea, are indigenous in Salta. Figs, oranges, peaches, walnuts, apples, and other fruits, have been introduced by Europeans, and flourish with great luxuriance in many of the central and S. provs.; the want of pop. being, for the most part, the only great drawback to the de-

Digitized by Google

velopment of the vast natural resources of the country. But the chief source of wealth is in the immense herds of horned cattle which wander over the widely-extended plains of the Pampas. Formerly, the greater number of these were unappropriated, like the land they roamed over, and were *lassoed* and destroyed at pleasure for their hides or fat, though sometimes, also, for their flesh, and sometimes for their tongues only, the rest of the body being left to beasts and birds of prey. But the Pampas are no longer unappropriated; a large part has been carefully measured by the government officers, and allotted to individuals, the extent and boundaries of whose *estancias*, or estates, are duly registered. Every animal a year old is branded with the mark of the owner, and that mark, being registered by the authorities, entitles him to claim his property wherever found. It has been estimated that, in the single prov. of Buenos Ayres, there are from 3 to 4 million head of cattle. Hundreds of thousands have, on some occasions, perished through inundation and drought without sensibly affecting the supply for the market. In Entre Rios, before the revolution, 'an estate of 3 leagues in length, by 2½ in breadth, that is 12½ sq. leagues, might have had upon it generally about 8,000 head of horned cattle, and 15,000 horses. The price of it, with stock, might be—horned cattle at 2*s.* each = 800*l.*; the horses at 6*d.* each = 375*l.*, and fixtures 100*l.*; cost, therefore, of stock and fixtures, 1,275*l.*, leaving the estate of 37½ sq. m. as a bonus to the purchaser.' (Robertson's Letters on Paraguay, ii. 215, 216.)

Cattle-rearing estates are frequently of vast size; and Candioti, probably the largest landowner of La Plata, is said, by Mr. Robertson, to have been the proprietor of 300 sq. leagues of territory, with 250,000 head of horned cattle, and 300,000 horses and mules. The annual increase upon a well-regulated *estancia* varies from 30 to 40 per cent., which yields an enormous profit to the proprietor, whose expenses are comparatively trifling. And since the revolution, which has thrown open the trade of S. America, the cattle, which were previously not worth more than 3*s.* or 4*s.* a head, are now worth 20*s.*, and for these 20*s.* the farmer can buy double the quantity both of necessaries and luxuries (his own commodity of cattle always excepted), which he could procure for them before. The *estancieros* of Santa Fé were formerly among the richest in the viceroyalty, and furnished by far the greater part of the 50,000 mules yearly sent to Salta for the service of Peru: but the stoppage of the trade with the latter country and Paraguay, and the attacks of the Indians, have impoverished and depopulated that province. The mules were commonly sent, when two or three years old, to a periodical fair, near Salta, to which the purchasers from Peru repaired, and bought them in droves, at the rate of from 14 to 16 dollars each. The struggle for independence stopped this traffic; for Peru being to the last in the possession of the royalists, all intercourse with Salta was long cut off, and, not having been renewed to any great extent, the breeding of mules has declined in La Plata.

The horses of the Pampas are similar to the common Spanish horse, and of all colours: like the cattle, the original stock was introduced from Europe. They wander wild in immense herds, being caught indiscriminately by the gauchos, whenever they are required. Though as serviceable to the gaucho as to the Arab, the former, owing, no doubt, to the animal being raised without any attention on his part, cares very little for his horse; he goads it in the most unmerciful manner, and when it drops with fatigue, he forthwith lassoes and mounts another, abandoning the exhausted horse to the wild animals. Mares are better treated by the Spaniards; but, among the Indians, mares' flesh is the ordinary animal food. It may be supposed that mutton is neither very excellent nor dear in this country, since, by an old royal edict, the inhabs. were forbidden to drive sheep *alive* into the brick-kilns for fuel. The wool, also, a few years ago, was hardly worth the expense of cleaning, but it has latterly much improved in quality. Still, however, the breed of sheep, like that of goats and hogs, is very inferior. The singular animal, the *coypou*, which furnishes the skins known in commerce by the name of *nutria*, is abundant in Buenos Ayres, its skins forming a principal article of export: the chinchilla also abounds in various districts. Along the Andes are found guanacos; llamas, and vicunnas. Wild boars, deer, with jaguars, pumas, and armadillos, are also met with. The biscacha, a rodent quadruped, which makes travelling over the Pampas dangerous from its numerous burrowings, is very abundant; and condors, vultures, and numerous birds of rich plumage, inhabit the country. Its greatest pests are giant ants, locusts, immense bugs, mosquitoes, and other insect tribes.

The *gauchos*, or native peons, are the descendants of European colonists, and many of them have sprung from the best families of Spain. They are at once the most active and the most indolent of human beings; living, when not on horseback (which they generally are) in the rudest manner in mud huts. They are without agriculture, subsisting almost wholly on the flesh of oxen and game of various kinds, which they catch by means of two singular weapons, in the use of which they are extremely dexterous, the *lasso* and the *bolas*. The former, used by most natives of La Plata and Chili, is a strong platted thong of green hide, about 40ft. in length, with an iron ring at one end forming a running noose, the other end being fixed by the peon on horseback to his saddle-girth. The gaucho, when about to seize an animal, whirls the noose with a portion of the thong horizontally round his head, holding the rest of the lasso coiled up in his left hand; and, when near enough to the object, at a precise point of its rotation, flings off the noose, which seldom or never fails to secure the animal. If a horse, it invariably falls over the neck; if an ox, over the horns. As soon as the rider has succeeded in his aim, he suddenly turns his horse, which sets its legs in a position to resist successfully the pull of the entrapped animal. The dexterity evinced in this operation, and the certainty with which an animal running at full speed, is caught, are very striking. The *bolas*, used also by the Indians, is briefly described in the art. PATAGONIA.

The Indians are of Araucanian origin, living, like the gauchos, chiefly on horseback, but partly in movable tents made of hides. To their main food, the flesh of mares and colts, if they add anything it is maize, obtained from the Spaniards in exchange for salt, cattle, and blankets made by their women. They live together in different tribes, each governed by a cacique. Some are friendly to the whites, but the greater part are bitterly hostile; and the two races maintain against each other an exterminating warfare. A few Indians are employed by the whites in agriculture; receiving in payment for their services some coarse woollen cloths, beads, baubles, and a few other articles of dress; but, in general, the independent tribes, wearing only a *poncho*, or short cloak, boots of colt-skin, and other articles of domestic manufacture, place little value on European goods.

Digitized by Google

Numerous settlements were made in the sixteenth century by the Jesuits in the Missiones, SE. of Corrientes, and civilisation is said to have made some progress among the Indians of this quarter; but after the expulsion of the Jesuits, in 1767, they speedily lapsed into their previous barbarism.

La Plata has scarcely any manufactures. Ponchos, saddle-cloths, and blankets are made by the Indian women, and sold in great numbers to the people of Tucuman and Salta. Cordova is the principal manufacturing town; but the above kind of goods and morocco leather, with wooden bowls and dishes, comprise almost all the articles made there. The foreign imports consist principally of European goods for the white colonists; mostly from Great Britain. 'The gaucho,' says a traveller, is everywhere clothed in British manufactures. Take his whole equipment—examine everything about him—and what is there (not of raw hide) that is not British? If his wife has a gown, ten to one it is made at Manchester: the camp kettle in which he cooks his food, the earthenware he eats from, the knife, spurs, bit, are all imported from England.' The foreign trade of the republic is increasing; it almost wholly centres in Buenos Ayres (which see).

Education, as may be supposed, is not very flourishing in the provinces; but in the chief towns it is not, upon the whole, so backward as in some other parts of S. America. Cordova has a university, and Buenos Ayres a good public library. Newspapers are published in several towns, and the press is quite free.

The constitution of the republic bears date May 15, 1853. By its provisions the executive power is left to a president elected for six years by representatives of the fourteen provinces, 133 in number; while the legislative authority is exercised by a senate and a house of deputies, the former numbering 30, and the latter 54 members. A vice-president, elected in the same manner and at the same time as the president, assists in the discharge of the executive. The president is commander-in-chief of the troops, and appoints to all civil, military, and judicial offices; but he and his ministers are responsible for their acts, and liable to impeachment before the senate and the house of representatives.

In the budget for the year 1863, the public income was estimated at 87,030,000 piastres, or 750,258*l.*, and the expenditure at 89,456,381 piastres, or 771,176*l.*, leaving a deficit of 2,426,381 piastres, or 20,918*l.*, to be covered by taxes on various articles of consumption. The public debt amounted to 3,185,000*l.* in 1863, the greater part of it being the result of two British loans. The army, at the commencement of 1864, consisted of 10,700 men, and the navy of seven steamers and ten sailing vessels.

This country was first discovered in 1517, and settled by the Spaniards in 1553. It was long dependent on Peru; but, in 1778, was erected into a viceroyalty, comprising, together with La Plata, Bolivia, Paraguay, and Uruguay. The English made an unsuccessful attempt on this country in 1807. In 1810 the struggle began between the inhabs. of Buenos Ayres and Spain, which terminated, in 1816, in the independence of the former. The first congress met at Tucuman, but the federal cap. was soon transferred to Buenos Ayres. In 1827 a war broke out between the republic and Brazil, respecting the possession of Uruguay (Banda Oriental), established as an independent state in 1828; and subsequently La Plata became involved in disputes with both Bolivia and France. These wars contributed to retard the march of her prosperity; but, with all her accumulated difficulties, La Plata has made great strides towards developing her abundant natural resources, so as to become a comparatively flourishing country.

PLATA (RIO DE LA), (*River of Silver*), a large river of S. America, draining with its numerous affluents the greater part of the states of La Plata, Banda Oriental, and Paraguay, with smaller portions of Bolivia and Brazil. It is formed by the union of two important branches, the Parana and Uruguay, and, gradually increasing in width, becomes a very large estuary, entering the S. Atlantic Ocean between Punta Negra (lat. 34° 55′ S., long. 55° 5′ W.) on the NE., and Cape St. Antonio (lat. 36° 21′ S., long. 56° 42′ W.) on the SW.; having on its N. bank the city and port of Monte Video and the colony of San Sacramento, while on the opposite side, 124 m. from its mouth, is Buenos Ayres. The basin of this great river is estimated to occupy about 1,250,000 sq. m., being inferior in extent only to those of the Amazon and Mississippi. Its length, from the source of the Paraguay to its mouth, is about 2,450 m.

The longest and most direct river, and that of the largest volume, belonging to this great water system, is the Paraguay, which, on receiving the waters of the Parana at Corrientes (27° 20′ S. lat.), assumes the name of that branch. It has its sources between lat. 13° and 14° S., in the low ranges connecting the great mountains of Peru and Brazil, which constitute the water-shed between the affluents of the Amazon and those of the Rio de la Plata. Many navigable streams join it from the E. as it passes through Brazil; but those on the W. side, though not so numerous, are much more extensive. Between the 17th and 19th degs. of S. lat. occurs that wide region of swamps called the Lake of Xarayes, which, during the periodical inundations of the river, is flooded so extensively as to form a great inland sea, stretching from E. to W. between 200 and 300 m., and from N. to S. upwards of 100 m., with a depth of 10 or 12 ft. At the close of the rainy season, these waters are carried off by the Paraguay, which is navigable from this point to its mouth for vessels of 40 or 50 tons, a direct distance of 1,200 m. The other western affluents are the Pilcomayo and Vermejo, which fall into it between Assumption and Corrientes, both having their sources in Bolivia, and flowing SE. through the great *chaco*, or desert. The Pilcomayo, after a course of 1,000 m., enters the main stream by two branches, about 60 m. apart: it is shallow, and not navigable even by canoes. The Vermejo, which falls into the main river about 135 m. below that last mentioned, rises on the E. slope of the Andes, and is navigable for large boats through the whole of the level country for nearly 700 m.

The Parana (which joins the Paraguay at Corrientes, and gives its own name to its lower part) rises in the table-land of Brazil, in lat. 21° S., hardly 120 m. from the shores of the Atlantic. It flows S. and then curves westward, separating Brazil from Paraguay, and, lower down, divides the latter country from the states of La Plata. It has numerous affluents, but though the main stream be upwards of 1,000 m. in length, it is not navigable for more than 100 m., owing to the *saltos*, or falls, the lowest of which, close to the island of Apipe, is in lat. 27° 26′ S., long. 56° 47′ W. From this point the river at once becomes navigable for vessels of 300 tons. The most important fall, however, is considerably higher up the stream, in lat. 23° 30′ S., being upward of 50 ft. in height. From Corrientes, the united river, now from 1½ m. to 2 m. in width, flows through a vast channel, much broken by islands, overrun with trees, and subject to inundation. The only considerable

Digitized by Google

trib. of the Parana below Corrientes is the Salado, which rises in the E. Cordillera of the Andes, and, after a devious course through the mountains, runs south-eastward through the Pampas, to its junction with the main river, near Santa Fé, in lat. 31° 40′ S. Here the Parana divides into numerous branches, formed by pretty large islands, becoming more frequent lower down the stream, which at length opens into the estuary of La Plata, by a long narrow delta, having two principal branches. The depth at the mouth is seldom less than 2 fathoms, and there is an uninterrupted navigation throughout the year for vessels of 300 tons from Assumption, upwards of 800 m. from the mouth. It has been estimated, says Mr. Darwin, that 'the river, at its source, has only a fall of 1 ft. per mile, and much less lower down in its course; indeed, a rise of 7 ft. at Buenos Ayres may be perceived 180 miles from the mouth of the Parana. But notwithstanding these advantages, we met during our descent very few vessels. One of the best gifts of nature seems here wilfully thrown away, so grand a channel of communication being left nearly unoccupied: a river in which ships might navigate from a temperate country, as surprisingly abundant in some productions as destitute of others, to another, possessing a tropical climate, and a soil, perhaps unequalled in fertility in any part of the world. How different would have been the aspect of this country if English instead of Spanish colonists had, by good fortune, first sailed up this splendid river!' (Voyage of the Adv. and Beagle, iii. 164.) The inundations of the Paraguay and Parana bear a close analogy to those of the Nile. 'Both rivers,' says Sir Woodbine Parish, 'rise in the torrid zone, nearly at the same distance from the equator; and both, though holding their courses towards opposite poles, disembogue by deltas in about the same lat.: both are navigable for very long distances, and both have their periodical risings, bursting over their natural bounds, and inundating immense tracts of country.' The Parana begins to rise about the end of Dec., soon after the commencement of the rainy season in the S. tropic, and increases gradually till April, when it begins to fall somewhat more rapidly till the beginning of July: a second rising, called *repunte*, is occasioned by the winter rains S. of the tropic of Capricorn, but it seldom overflows the banks.

The ordinary average of the increase below Corrientes is 12 ft.; but at Assumption, where the river is more confined, the rise is said to be sometimes as much as 5 or 6 fathoms. Occasionally, however, these floods are much higher, penetrating into the jungles of the interior, and drowning numbers of wild animals, the carcasses of which poison the air for months afterwards. The river at these times is exceedingly turbid, from the great quantity of vegetable substances and mud brought down by it: the velocity of the stream in the higher and narrower parts at first prevents their deposition; but as it approaches the lower lands, or pampas, they are spread over the face of the country, forming a grey slimy soil, which increases vegetation in a surprising degree. The extent of ground thus covered during the inundations is estimated at 30,000 sq. m.

The Uruguay, the other great branch of the æstuary of La Plata, takes its name from the numerous falls and rapids which mark its course. It is upwards of 800 m. in length, rising in lat. 27° 30′, on the Sierra de S. Catherina, in the prov. of that name, only about 75 m. W. the Atlantic Ocean. Its course is at first nearly due W., but is afterwards turned southward by a mountain range, separating it from the Parana. It receives several important affluents, of which the Negro, the principal river of Banda Oriental, is the chief. It joins the æstuary of La Plata about 50 m. below the junction of the latter; and its clear blue waters may be distinguished from the muddy stream of the Parana for miles after their junction. The country through which the Uruguay flows is of a very uneven and rocky character; in consequence of which the navigation is broken by many reefs and falls, only passable during the periodical floods. Of these, the lowest are the Saltos Grande and Chico, in lat. 31° 30′, about 190 m. above its mouth.

The æstuary of the Rio de la Plata the recipient of these great rivers, is about 185 m. in length, its breadth at the mouth being about 130 m., though it gradually becomes narrower, till, opposite Buenos Ayres, it has a width of only 29 m. The coast on the N. side is in general high and rocky; whereas on the opposite side the shores are low, extending inwards in immense pampas. The depth of the river increases towards the mouth, where it averages 10 fathoms; but at Monte Video it scarcely exceeds 3 fathoms, and gradually lessens, so that vessels drawing more than 16 ft. water cannot ascend above Buenos Ayres. E. of Monte Video is an immense bank of sand and shells, called the English Bank; besides which there are many other sand-banks, covered when the river is low with only about 8 ft. water, one of which, called the Ortiz, is in some parts between 11 and 12 m. in width. The currents are extremely irregular, both in rate and direction, a consequence of the immense volume of water brought down at certain seasons by the Parana, as well as of the influence of the winds at the mouth of the river: indeed, this variability of the winds and currents constitutes one of the chief difficulties in navigating the Plata, which, on this account, has been termed '*El Infierno de los Marineros.*'

In calm weather the currents are generally very slack, and almost as regular as tides, setting up and down the river alternately. The effect produced by the *pamperos*, or SW. gales, so called from their blowing over the pampas S. of Buenos Ayres, is remarkable from the singular fluctuations in the depth of the water before and after their occurrence, the river being always higher than usual when they begin; whereas, after they have continued for a few hours, the water is forced out to sea, so that the sand-banks begin to appear, and, on some occasions, even the anchoring grounds have been laid bare! The tides are so much disturbed, and, as it were, hidden by the currents, that it has been affirmed they have no existence; but, according to the 'American Coast Pilot,' they are clearly discernible in calm weather, though their rise seldom exceeds 6 ft. (American Coast Pilot.)

The Rio de la Plata, which, with its affluents, furnishes an internal navigation of many thousand miles, must of course, even in its present neglected state, have a considerable commerce, of which BUENOS AYRES and MONTE VIDEO are the great *entrepôts*, and to which the reader is referred for further details. The river trade, however, is far less extensive at present than is generally supposed; the intercourse with Chili and Peru having greatly decreased since the establishment of independence at Buenos Ayres, and that with Paraguay having been all but annihilated by the exclusive and despotic policy adopted by its late dictator, Dr. Francia. The river is pre-eminently well-adapted for steam navigation, and, under more happy circumstances, might become the medium of a trade inferior only to that of the Ganges and the Mississippi.

Digitized by Google

PLATÆA, a considerable city of ancient Greece, now wholly in ruins, in Bœotia, at the N. foot of Mount Cithæron, about 7 m. SW. Thebes. This town has acquired renown from its having given its name to the great battle fought in its vicinity, on the 22d September, *anno* 479 B.C., between the combined Greek forces under Pausanias, and the Persian army under Mardonius, generalissimo of the forces left by Xerxes in Greece. The Grecians gained a most complete victory. Mardonius was killed in the action; and the camp to which the fugitives retreated having been forced, a prodigious slaughter took place. In fact, with the exception of about 40,000 horse, who escaped under Artabazus, the entire Persian army, said to have been nearly 300,000 strong, was all but entirely annihilated. (Herod., lib. ix. cap. 69.) The victorious Greeks, besides securing the independence of their country, found an immense booty in the camp of the Persians. A tenth part of the spoil was given to Pausanias, the general, whose great talents materially contributed to the success of the day; and another tenth was set apart as offerings to the gods. From the produce of the latter was presented to the shrine of Delphi a golden tripod, supported on a brazen pillar formed of three serpents twisted together. And it is a singular and curious fact, that this identical pillar, having been carried to Constantinople, still exists in the Hippodrome of that city! (Herod., lib. ix. cap. 80; and the arts. CONSTANTINOPLE and DELPHI, in this work.)

Notwithstanding the services the Platæans had rendered to the common cause in this great struggle, their city was, at a subsequent period, *anno* 374 B.C., taken and razed by the Spartans. But she was afterwards restored, and her walls rebuilt, by Alexander the Great. The existing remains of the city date from the æra of that conqueror.

PLAUEN, a town of the k. of Saxony, circ. Zurichau, cap. districts Plauen and Pausa; on the White Elster, 58 m. S. by W. Leipsic, on the railway from Leipzig to Nuremberg. Pop. 16,166 in 1861. The town is built on uneven ground, walled, and has several churches and hospitals, a gymnasium, and a royal castle. It is a thriving place, with manufactures of linens, and cotton goods and yarn; it has also considerable markets for wool. Pearls are occasionally found in this part of the river, and there is a royal pearl fishery at Oelsnitz, in the neighbourhood.

PLYMOUTH and DEVONPORT, two parl. bors. and sea-port towns of England, co. Devon, and hund. Roborough, forming together the principal naval port of Great Britain after Portsmouth, at the bottom or N. end of Plymouth Sound, on a kind of rocky promontory between the Tamar and Plym, 36 m. SW. Exeter, and 246 m. W. by S. London by Great Western and South Devon railway. Pop. of parl. and mun. bor. Plymouth, 62,599 in 1861; pop. of mun. bor. Devonport, 50,440, and of parl. bor. Devonport, 64,783 in 1861. The towns are built on rather unequal ground; Plymouth being on the E., and Devonport on the W. side of the space (3 m. broad) between the two rivers: the medial suburb of Stonehouse connects the two towns. Plymouth is old and irregularly laid out; several of its streets are narrow and ill-built, a few also being steep. Many improvements, however, have been made within the last few years, and it has now several handsome streets and good squares, lined with substantial stone houses. Devonport, formerly called Dock, may be said to be the new town of Plymouth, having been almost entirely built since 1760: most of its streets are straight and wide, and the older houses are being gradually replaced by handsomer and more substantial buildings. Its wide handsome streets, which cross each other at right angles, are paved with limestone quarried in the neighbourhood. Both towns are well lighted with gas, and water is abundantly supplied to Plymouth by the corporation, and to Devonport by a joint stock company.

The principal public buildings of Plymouth are, a modern guildhall, with a small attached bor. gaol; an exchange, and custom-house; a very elegant edifice, called the Athenæum, belonging to the Plymouth Literary Institution; a public library; and a spendid hotel and theatre built by the corporation, at an expense of nearly 40,000*l*. The portion of the latter building forming the theatre and assembly rooms was destroyed by fire on the 6th of January, 1863, but has since been rebuilt. Among the other public buildings are the Royal Union Baths, and a plain stone structure called the Freemasons' Hall. There are also a new and extensive market-place, formed at an expense of more than 10,000*l*.; and several barracks, hospitals, and prisons belonging to government. The Naval Hospital, at Stonehouse, is of great extent, and admirably arranged; and opposite to the water-entry of this hospital is the Royal Military Hospital, with an arcade of 41 arches, supporting a terrace, and covered promenade below: there is, also, a large military prison at Millbay, capable of accommodating nearly 3,000 persons. One of the most striking features of Plymouth is its citadel, erected on a commanding eminence in 1670: it has five bastions, and is surrounded on three sides by a deep ditch and counterscarp: the interior comprises a governor's house, residences for numerous military officers, and extensive barracks. The victualling office, erected at Duval's or Devil's Point, S. of Stonehouse, is of large size, and replete with every convenience. W. of the citadel is the elevated walk called the Hoe, which commands a fine view of the Sound and the surrounding country, including Mount Edgcumbe, with the Cornish hills in the W., the high land of Dartmoor in the N., and Saltram, its neighbourhood, and distant torrs in the NE.

Plymouth has several good ecclesiastical edifices. St. Andrew's church, erected at different periods between the 12th and 15th centuries, is a large and rather handsome structure, with a square embattled tower; its interior comprises accommodation for 2,500 persons, and is, on the whole, elegantly arranged. Charles's church, built towards the close of the 17th century, and named after King Charles I., is a neat building, with a square tower surmounted by a light steeple. There are several other churches and chapels-of-ease, besides the chapel in the citadel, and the mariners' church, called Trinity Church, as well as some Baptist chapels, and others belonging to the sect denominated 'Plymouth Brethren.' The Wesleyan, Associated, and Bryanite Methodists, Independents, Presbyterians, and Unitarians, have also chapels; and there is a meeting-house for the Society of Friends, and a synagogue. Five Sunday schools are attached to the Established Church, and religious instruction is furnished by the Dissenters to many hundred children of both sexes. A grammar school, in the patronage of the corporation, is attended by from 20 to 30 boys; and another school, formerly proprietary, furnishes a good general education to about 50 boys. There is, likewise, an endowed charity school for 80 children of each sex. Dame Rogers's charity gives clothing and instruction to 52 girls, and a Lancastrian school is attended by 176 boys and 120 girls. An orphan asylum was established some years ago; and there are 4 sets of almshouses, besides the 'South Devon and East Cornwall Hospital,' and 'Public Dispen-

Digitized by Google

sary,' for providing the poor with gratuitous medical aid; and other benevolent and religious institutions supported by voluntary contributions. The literary establishments comprise the Plymouth Institution, or Athenæum, for the promotion of science and literature; the Natural History Society of Devon and Cornwall; a public library with 6,000 vols.; a medical library, established in 1794; a law library, established in 1815; a theological library; and a mechanics' institute.

Devonport, unlike Plymouth, is a regularly fortified town, surrounded by lines commenced in the reign of George II., but since much improved. It is also defended by the fortress of Mount Wise, between the town and the harbour on the S., and by a fort on Mount Pleasant to the N., and a battery at Obelisk Point on the peninsula of Mount Edgcumbe, on the opposite side of the harbour. Inasmuch, however, as several of the adjacent heights command the town, it could not oppose any effectual resistance to an army attacking it by land; but it is quite secure from any attack by sea. Close to the fort of Mount Wise is the governor's house, a handsome stone building, fronted by a parade, forming a favourite promenade: on its N. side is the port-admiral's house, a modern, capacious stone building. A town-hall has been erected, and other edifices for various purposes have been built since the grant of the charter in 1838. Opposite the town-hall (which is a neat Doric structure) stands a fluted column, erected in 1847, intended to commemorate the naming of Devonport, in 1824: its summit commands a fine view of the harbour and surrounding scenery. There are 11 churches, and numerous dissenting chapels, belonging to Baptists, Independents, Wesleyan Methodists, and Unitarians, with attached Sunday schools. There are also several endowed and subscription schools, furnishing instruction to nearly 5,000 children of both sexes. A public dispensary and savings bank have also been established. Devonport, however, is mainly dependent on its dockyard, which, indeed, constitutes by far the most interesting feature of the united town.

Plymouth has been, for a lengthened period, the second naval harbour of Great Britain. The dockyard at Devonport, commenced in the reign of William III., is one of the finest establishments of its kind in Europe. It extends along the shore of Hamoaze 3,500 ft., with an extreme breadth of 1,300 ft., including an area of 75 acres: the entrance on the land side is from Fore Street, one of the principal thoroughfares of Devonport. The basin of the dock is only 250 ft. in length, and 180 ft. in width; but the excellence of Hamoaze as a natural harbour renders a larger basin of less importance. The wharf-wall extends along the shore, and the depth of water is such as to allow the largest ships of the line to come close up to the principal jetties to take in stores.

The dockyard is divided into two nearly equal parts by a canal (similar to that in Portsmouth), which furnishes easy access for boats to the storehouses, roperies, and smithies. In the N. half, and facing the harbour, are dry docks for ships of 120 guns, with jetties for their accommodation after having been undocked. A fine double dock, for ships of 74 guns, communicates directly with the harbour, and a smaller dock opens into the older basin, in addition to which a capacious new basin is now being formed in the SW. part of the yard. The roofs of the docks are extraordinary specimens of architectural skill, each being formed of a single arch, unsupported either by buttress or pillars. Workshops and sheds are erected in various parts, and a quadrangular range of fire-proof stone buildings comprises magazines of stores, sails, and rigging. At the N. end, also, is a range of handsome houses, with attached gardens, forming the residence of the principal officers. On the S. side of the yard are building slips for large vessels, and others for those of inferior size: near these is a building in which planks are steamed, when required to receive any particular curvature; and in this part, also, are extensive timber-berths, sawpits, and mast-houses, besides a large pond in which masts and yards are kept soaked to prevent their cracking by exposure to the sun. The blacksmiths' shop, about 200 ft. square, comprises many forges. Anchors are made in it of the largest size. The ropery, which is the finest in the kingdom, comprises 2 ranges of building, each 1,200 ft. in length, and 3 stories in height, built entirely of stone and iron, as a security against fire: contiguous to them is the hemp-magazine. In this part of the yard, also, is the model-loft, in which are the patterns of the various parts of ships ordered to be constructed by the Admiralty. The gun-wharf, or arsenal, separated from the dockyard by North Corner Street, includes within the walls about 4¾ acres: it has two principal warehouses for muskets, pistols, and other small arms, with sheds for gun carriages, a powder magazine, and a cooperage. A great number of men are employed in the different departments of the dockyard, especially during war, or when a fleet has to be fitted out; and the scale on which the various operations are conducted, the diversity of the employments, the perfection of the machinery, and the activity prevalent throughout the establishment, are all objects of admiration. But no individual who is not in uniform, or is not well known to the authorities, is allowed to enter the dockyard, unless by special permission.

The *harbour of Plymouth* is double, being formed by the æstuaries of the Plym and Tamar, opening into the NE. and NW. angles of Plymouth Sound; the æstuary of the Plym forms the Catwater, a convenient and capacious harbour for merchant vessels; and that of the Tamar expands into the noble road or harbour of Hamoaze, about 4 m. in length, by about ½ m. in width: it is almost completely land-locked, and has moorings for 100 sail of the line, with secure anchoring-ground for a still larger number: its average depth is 9 fathoms at ebb tide, and the largest ships float close to the quays. Subordinate to the harbour of Catwater is Sutton-pool, a small tide-basin, to the E. of the citadel, surrounded by quays for the convenience of colliers, coasting vessels, and fishing smacks, by which it is almost exclusively frequented. In Mill-bay, also, to the W. of Plymouth, a pier has been constructed for the accommodation of the largest steamers at all times of the tide. Spring tides rise from 15 to 18 ft., and neaps from 6 ft. to 8 ft.

The bay or arm of the sea, called Plymouth Sound, into which these harbours open, is used for the accommodation of the ships that have been refitted in the dockyards, and as a safe asylum for all sorts of ships in stormy weather. Owing, however, to the heavy swell thrown in from the S., it was formerly a very unsafe place for anchoring; and, to obviate this inconvenience, a stupendous breakwater, or mole (similar to that of Cherbourg, and, still more, to that of Civita Vecchia, constructed by the emperor Trajan), has been formed in the middle of the Sound, stretching in a line, straight in the middle but inclined inwards at either extremity, between Cawsand Bay on the one side and Bovisand Bay on the other. The material consists of rough cubical blocks, each weighing from 1½ to 2 tons and upwards. The top of the breakwater presents a flat surface,

Digitized by Google

about ten yards in width, whence it slopes on both sides to the bottom, the principal slope being on the side next the sea. A lighthouse is erected on its W. extremity.

This great undertaking has cost a very large sum, but the important object in view in its construction has been completely attained. That part of the Sound within the breakwater has been rendered one of the very best roadsteads in the world: it is accessible on either side, and is sufficiently capacious to admit the largest fleets, which ride under cover of this immense bulwark during the stormiest weather in perfect safety. The Eddystone lighthouse stands about 14 m. S. by W. the breakwater, and is an important appendage to the harbour, the entrance to which would, but for this beacon, be comparatively dangerous, in consequence of the hidden rocks on which it is placed. Within the breakwater, and opposite to and commanding the entrance to Hamoaze, is St. Nicholas Island, which has been strongly fortified, and constitutes, with the redoubt, at Staddon height, above Bovisand quay (near which is formed the reservoir for supplying H. M's ships with water), the principal defence of the town and harbour on the side of the sea. The Hamoaze is bounded on the S., directly opposite Devonport, by the beautiful peninsula of Mount Edgcumbe, the seat of the noble family of Edgcumbe. On the upper part of the Hamoaze, and on its W. side, is the town of Saltash. A splendid bridge, known as Brunel's Albert Bridge, unites the counties of Devon and Cornwall: it is constructed of two spans of 455 feet each, and stands 100 feet above high water mark.

In Catwater harbour there are wet and dry docks, formerly suited to the construction of 74-gun ships; but for many years they have been used exclusively for merchant-vessels. On the E. side of the Catwater are the villages of Oreston and Turnchapel, mostly occupied by persons engaged in the dockyards, or otherwise connected with the trade of the port. In this direction, also, are the finely situated villages of Upper and Lower Hooe. Mount Batten, at the SW. extremity of the Catwater, opposite Sutton-pool, is a very picturesque object. It is surmounted by an ancient castle.

The trade of Plymouth is of considerable importance: the gross customs' duties amounted to 181,190*l.* in 1863. There belonged to the port on the 1st Jan., 1864, 233 sailing vessels under 50, and 214 above 50 tons, besides 12 steamers, of an aggregate burthen of 409 tons. A large part of the trade of the town depends on the dockyard. Steamers touch here daily, on their passage between London, Dublin, Belfast, and Southampton. The manufacturing establishments of Plymouth comprise a very extensive sail-cloth factory, a sugar-refinery, glass-house, starch-factory, and a soap-boiling establishment. The communication with the country E. of the Plym is effected by an iron bridge of five arches, raised on granite piers, built at the sole expense of the late Earl of Morley. Plymouth is united by railway with Exeter, Bristol, and the metropolis.

Plymouth was incorporated in 13 Henry VI. Its present municipal officers are a mayor, 11 aldermen, and 36 councillors, the borough being divided into six wards. Quarter and petty sessions are held under a recorder; and there is also a borough court for the trial of civil actions, and a county court. Devonport has also been made a corporate town, and divided into wards; its municipal officers being a mayor, aldermen, and councillors. It has a commission of the peace under a recorder. Plymouth has regularly sent 2 mems. to the H. of C. since the reign of Henry IV., but it occasionally exercised the franchise at an earlier period. The electoral boundaries were enlarged by the Reform Act, so as to include with the old bor. a small portion of land NE. the town on the Exeter road. Reg. electors, 2,913 in 1865. The Reform Act constituted Devonport a parl. bor., and conferred on it the privilege of returning 2 mems. to the H. of C. The electoral limits comprise the par. of Stoke-Damerell and township of Stonehouse. Registered electors, 2,826 in 1865. Markets, in Plymouth, on Monday, Thursday, and Saturday; in Devonport, on Tuesday, Thursday, and Saturday; both abundantly supplied with every kind of provisions.

Plymouth, originally called Tameorwerth, and afterwards Sutton (or South Town), received its present name at the period of its incorporation, in the reign of Henry VI. The town received a considerable accession of wealth on the dissolution of the monasteries, and in the reign of Elizabeth was greatly benefited by a supply of good water, conveyed by a channel, 24 m. in length, from Dartmoor, planned by the famous Sir Francis Drake, a native of the town. During the same reign, Plymouth Sound was the rendezvous of the fleet opposed to the Armada, and also of the fleet sent against Cadiz. The town suffered greatly, on three occasions, from the plague, which, in 1626, carried off 2,000 persons. During the parliamentary wars it embraced the cause of the parliament, and was besieged by Prince Maurice and the royalists, though without success.

Devonport, as is already stated, is quite a modern town, which owes its rise to the rapidly increasing importance of the dockyard during the American and French wars. Stonehouse, which connects Plymouth with Devonport, is still more modern, and has been wholly built within the present century.

PLYMOUTH, a town and sea-port of the U. States, in Massachusetts, cap. co. of its own name, 35 m. SE. Boston, with which it is connected by railway. Pop. 7,290 in 1860. The town has a court-house, gaol, bank, and several churches, and some cotton and woollen factories, iron-works, and mills, the machinery of which is impelled by a rivulet intersecting the town. The harbour, though spacious, is so shallow that vessels drawing more than 10 or 11 ft. water must partly unload at a distance from the wharfs. Plymouth is the oldest town in New England, its foundations having been laid in 1620.

PLYMPTON EARLE, or PLYMPTON MAURICE, a decayed bor., market town, and par. of England, co. Devon, hund. its own name, 4½ m. E. Plymouth. Area of borough and parish, which are co-extensive, 170 acres. Pop. 900 in 1861, and 933 in 1841. The town comprises two streets disposed in the form of the letter T.; and it has an old guildhall, under which is held the corn-market. The church is small, and the living is a curacy subordinate to the adjoining parish of Plympton St. Mary. The Wesleyan Methodists and Independents have places of worship. N. of the town are the ruins of a once magnificent castle, occupying nearly 2 acres of ground: it was built by Richard de Rivers, earl of Devonshire, to whom the town was granted, with 'the honour of Plympton,' by Henry I. Plympton Earle claims to be a bor. by prescription, but received a royal charter in the 13th Edward III. It was one of the stannary towns; but for many years it has been in a decaying condition, and the bor was not considered of sufficient importance to be included in the provisions of the Municipal Reform Act. But, decayed as it is, it sent 2

Digitized by Google

mems. to the H. of C., with some interruptions, from the reign of Edward I. down to the Reform Act, by which it was disfranchised. Markets on Saturday; fairs for cattle and woollen cloth, Feb. 25, April 5, Aug. 12, and Oct. 28.

POCKLINGTON, a market town, par., and township of England, E. riding co. York, Wilton Beacon, div. of wap. Harthill, on a small trib. of the Derwent, 12½ m. E. by S. York. Area of par., including 4 townships, 4,380 acres. Pop. of township, 2,671 in 1861. It is a good county town; and the market-place, though small, is conveniently arranged. The church, in the centre of the town, is a large cruciform structure, with a handsome tower at its W. end, and a chancel containing some carved stalls: the living is a vicarage in the gift of the dean of York. A free grammar school was founded here in 1526, and endowed with lands that now yield upwards of 1,000*l.* a year: the master is appointed by the master and fellows of St. John's College, Cambridge. A national school also was established in 1819. It has no manufactures, but a considerable trade has grown up, chiefly in corn, flour, timber, coal, and general goods, since the completion of the canal from E. Cottingwith on the Derwent, to Street Bridge, about a mile from the town. Markets on Saturday: fairs for horses, March 7, May 6, Aug. 5, and Nov. 8. Great show of horses, Feb. 24 and Dec. 17.

PODOLIA, a government of Russia in Europe, chiefly between the 48th and 50th degs. of N. lat., and the 26th and 31st degs. of E. long.; having N. Volhynia, NE. Kiev, SE. Kherson, SW. Bessarabia, and NW. Galicia. Length, NW. to SE., 240 m. Area, 15,200 sq. m. Pop. 1,748,466 in 1858, principally Poles, but including some Russians, and about 150,000 Jews. The greater part of the country is flat, but a low branch of the Carpathians extends through it in an easterly direction. The general slope is towards the SE. Principal rivers, Bug and Dniestr, which last forms the SW. boundary. The climate is healthy, and mild enough for the vine and mulberry to flourish in the open air. Soil stony, but in general very fertile, and Podolia formerly ranked among the most valuable provs. of Poland, as it now does of the Russian empire. Corn is produced in abundance; the produce exceeding the home consumption by one-third. Hemp, flax, tobacco, hops, beans, and various fruits are grown. The culture of the vine, though on the increase, is not of any importance; and orchard and garden husbandry is conducted in a negligent manner. Pastures luxuriant. Cattle-rearing is an important business; and many head of cattle are sent into Germany, where they are much prized for their beauty and excellence. The sheep yield but indifferent wool. A good many hogs are kept, as well as poultry and bees. The forests are estimated to cover 991,442 *deciatines*, or nearly 3 million acres, only a small proportion of which belongs to the crown. Game is scarce, but the fisheries are highly productive. Saltpetre, lime, and alabaster are the principal mineral products. Manufactures are quite insignificant; except distilleries, there are only a few woollen cloth, leather, potash, and saltpetre factories. The trade, which consists mostly of the export of grain to Odessa, and cattle to Galicia and Germany, is wholly in the hands of the Jews. Podolia is divided into 12 districts; its cap. is Kaminietz. It is one of the 10 governments privileged with respect to its judicial administration and the distillation of spirits; it is subordinate to the government of Kiev, both as to military affairs and public instruction. Most of its inhabs. belong to the Greek Church.

Podolia was long governed by its own princes; but, in 1569, it was united to Poland, who erected it into the two voivodes of Podolia and Braczlaw. It has belonged to Russia since 1793.

POITIERS, or POICTIERS (an. *Limonum*, and afterwards *Pictavi*), a city of France, dép. Vienne, of which it is the cap.; on the Claim, a tributary of the Vienne, 58 m. SSE. Tours, and 78 m. NE. by E. La Rochelle, on the railway from Paris to La Rochelle. Pop. 30,563 in 1861. The city is surrounded by old walls, flanked with towers. Few French cities occupy a greater extent of ground, but a large space within the walls consists of fields and gardens. The streets are inconveniently steep, ill-paved, and gloomy, and the city generally is ill-built, its houses being without either taste or dignity. It has but one good square, the *Place Impériale*, in which was formerly a statue of Louis XIV. Previously to the Revolution, few towns in France had so many churches; and though much diminished, many of them still exist; but there are few other public edifices worth notice. The cathedral is a large, though rather low Gothic edifice, said to have been founded by Henry II. of England. The church of St. Radegonde is much more ancient, being said to owe its origin to the wife of Clotaire, in 587. The crypt containing her tomb, and some other portions of the original edifice, are still extant, but the rest of the building mostly dates from the 11th century. The church of Notre Dame is very handsome, and several of the other churches have some curious tombs and monuments. The hall of justice, public library, with 12,000 vols., bishop's palace, theatre, cavalry barracks, and baths, are the other most conspicuous buildings. Poitiers is the seat of a royal court, of tribunals of original jurisdiction and commerce, a university academy, faculty of law, and royal college; and has societies of agriculture, arts, and sciences, a departmental nursery ground and botanic garden. It is the see of a bishop, whose diocese comprises the dépts. Vienne and Deux Sèvres. Its manufactures though not extensive, comprise very various articles, as coarse woollen cloths, blanketing, hosiery, cotton netting, lace, hats, prepared sheep-skins, and goose-down. It has a considerable trade in agricultural produce, and six annual fairs.

Poitiers is one of the most ancient towns in Gaul. The vestiges of a Roman palace, an aqueduct, and an amphitheatre, are still visible. The Saracens were totally defeated in 732 by Charles Martel, in a great battle between this city and Tours. But Poitiers is chiefly memorable for the signal victory obtained in its vicinity on the 19th Sept. 1356, by an English army, commanded by Edward the Black Prince, over a vastly superior French force commanded by king John. The French army was wholly dispersed; and, besides many thousand common soldiers, a vast number of persons of distinction were killed or taken prisoners, the king and one of his sons being among the latter.

POITOU, the name of an extensive prov. of France, previously to the Revolution: it is now distributed among the departments of Vienne, Deux Sèvres, and Vendée.

POLA, in antiquity, a splendid city, but now a poor, decayed sea-port town of the Austrian empire, gov. Trieste, on the W. side, and near the S. extremity of the peninsula of Istria; at the bottom of a bay of the same name. Pop. 3,524 in 1857. The city is surrounded by walls flanked with towers constructed by the Venetians in the 15th century, is the seat of a bishopric, has a castle, a cathedral, a Greek church, and 3 convents. The harbour is one of the best on the Adriatic. The

Digitized by Google

entrance to it is narrow, but the water is deep, and within it expands into a large basin, land-locked and safe. It might easily be rendered an excellent station for a fleet intended to command the Adriatic. The chief occupation of the inhabs. is fishing. The sand used in the Venetian glass works is brought from its environs.

Pola owes all its celebrity to its ancient greatness, and to the magnificent remains of antiquity of which it has still to boast. The principal of these is a noble amphitheatre, standing outside the town, and near the bay. This splendid monument is in a very perfect state of preservation and is scarcely exceeded in magnificence by that of the Colosseum at Rome, while, in point of dimensions, it is in a very small degree only inferior to the amphitheatre of Verona. It is in the form of an ellipsis, its longest diameter being 436 ft. 6 in., its shortest 346 ft. 2 in., and its height, in the most perfect parts, 97 ft. It is estimated to have been capable of accommodating above 20,000 spectators. The height is divided into 3 stories, and the whole circ. into 72 arches. It is constructed of Istrian stone of a very superior quality, and which, in appearance and durability, is equal to the purest marble. Within the town are two temples which, when perfect, must have been exactly similar, and worthy the best period of the Augustan age. The best preserved is dedicated to Rome and Augustus Cæsar. There is, also, an arch raised, as the inscription announces, by a Roman lady, in testimony of her affection for her husband. It is a beautiful and elegant structure, admired for its simplicity and admirable proportions. Part of a Roman gateway, containing three arches, was discovered by Messrs. Stanhope and Allason, in 1816. The cathedral has apparently been built on the site of an ancient temple. These ruins sufficiently attest the former magnitude and wealth of the place. Strabo, Pliny, and Mela say that it was founded by a colony from Colchis; and of its great antiquity there can be no doubt. It became a Roman colony, and was for a lengthened period the principal town of Istria. Malte-Brun says that it was destroyed by Cæsar for its devotion to Pompey, and rebuilt by Augustus, at the intercession of his daughter Julia. But there is no evidence whatever of its having been so destroyed, or of its restoration in the way now mentioned, other than what may be derived from the fact of its having been sometimes called *Pietas Julia*.

POLAND (Lat. *Sarmatia*; Pol. *Polsk*, signifying a plain country), the name of a formerly independent and extensive country of E. Europe, comprising the territories between the 48th and 58th degs. N. lat., and the 15th and 33d degs. E. long.; including with Poland Proper, Lithuania, Samogitia, Courland, the Ukraine, Podolia, and other provs. now belonging to Russia, with Galicia, belonging to Austria, the prov. of Posen, and some other districts in Prussia. The kingdom of Poland ceased to be an independent country in the year 1795, after the 'third partition.' By this act of the three monarchs of Prussia, Austria, and Russia, the country was broken up as follows:—

	Sq. Miles	Population
To Prussia . .	52,000	3,500,000
To Austria . .	64,000	4,800,000
To Russia . .	168,000	6,700,000

By the stipulations of the peace of Tilsit, July 7, 1807, the greater part of the territory taken by Prussia, with a portion of the country acquired by Austria, was formed into a 'grand duchy of Warsaw,' under the king of Saxony. This arrangement was again upset at the congress of Vienna, when a new 'kingdom of Poland' was formed, and the whole ancient territory of the Polish nation redistributed as follows:—

	Sq. Miles	Population
To Prussia . .	29,000	1,800,000
To Austria . .	30,000	3,500,000
To Russia . .	178,000	6,900,000
To Kingdom of Poland	47,000	2,800,000

The population of the kingdom of Poland at the census of 1861, amounted to 4,840,466 persons.

The Male Population being, according to these Returns	2,340,216
The Female, ditto	2,500,250
Total . .	4,840,466

Of the pop. about 3-4ths consist of Poles, 1-10th of Jews, and the remainder principally of Russians, Germans, and Tartars.

The whole country, except in the S., where are some scattered offsets from the Carpathian Mountains, is an extended plain, with a general slope towards the Baltic, in which its principal rivers have their embouchure. These are the Vistula, with its tributaries, the Wieprz, Bug, Narew, Pilitza, the Niemen, and the Warta. The Vistula, after bounding the kingdom for a lengthened distance on the S., traverses its centre, leaving it near Thorn. The Niemen, Bobr, and Bug bound nearly all the E.; and the Prosna, a tributary of the Warta, a considerable part of the western frontier. These rivers are all more or less navigable. There are innumerable smaller streams, Poland being an extremely well-watered country; and in the N., E., and W. are a great number of lakes and many very extensive marshes. The surface, though flat, is abundantly diversified, presenting alternately fertile corn lands, savage steppes, rich pastures, sandy wastes, dense forests, and dreary swamps. The climate is rigorous: the cold of winter is often as great as in Sweden, in a lat. 10 degs. higher; and, in 1799, the thermometer descended to 27° below zero (Réaum.). In summer, however, the heat sometimes rises to 120° (Fah.). The mean temperature of the year at Warsaw is about 46° Fah. The atmosphere is humid, rainy and cloudy days occupying half the year. Between the Vistula and the Prussian frontier the soil is generally fertile, the most productive districts being in the govs. of Cracow and Sandomir, and the neighbourhood of Warsaw. In the NE. are also some very fertile tracts; but there, and in the govs. of Płock and Lublin, the surface is in great part waste.

'The traveller in Poland,' says an accurate observer, Mr. Burnett (View of Poland, p. 29), sometimes finds himself in an expanse of surface, almost without a house, a tree, or any single object large enough to attract his notice. Soon, however, are descried the skirts of some vast forest fringing the distant horizon; and, on entering it, we proceed for 8 or 10 miles, more or less, winding with the road, through lofty pines, &c., precluded from the sight of all objects but trees and shrubs. Sometimes, in the midst of a forest, we meet with a small spot of ground (for example, of 10 or 20 acres) cleared and cultivated; its sides prettily fenced by the green surrounding woods. Sometimes a small lake is found thus situated, its borders ornamented in a similar manner; and these, generally speaking, are the prettiest scenes which Poland furnishes. These forests, in some places, are 15 and even 20 m. in all directions. Indeed, if we exclude morasses and the level pasture lands, perhaps not more than half of the country, speaking generally, is cleared. At distant intervals are found plains of some extent, affording rich pasturage. The best are those con-

Digitized by Google

tiguous to the Vistula, some of which are periodically overflowed by that river. Such are those in the neighbourhood of Warsaw, which supply that town with good butchers' meat.' This description was written early in the present century; and, though a considerable proportion of forest land has been cleared in the interval, it is still substantially accurate. Of 741,000 *włoka* of land comprised in the kingdom, 255,000 *wł.* are supposed to be arable; 205,000 in forest; 171,000 in natural pastures, rivers, and marshes; 46,000 in meadows; 38,000 occupied with roads and buildings, and 26,000 in gardens. Poland has, for a lengthened period, been the granary of a great part of Europe. But Volhynia, Podolia, and Galicia, formerly included in the Polish dom., were the principal corn-growing provs.; and in the existing kingdom of Poland, with the exception of Sandomir and Cracow, the land, according to Mr. Jacob (the great authority on this subject, his 'Report on the Agriculture of Poland' being still the best book), is so poor that it can scarcely be made to yield a medium crop of wheat more than once in 9 years. The soil is mostly thin, sandy, or sandy loam, resting chiefly on a bed of granite, through which the heavy rains gradually percolate. S. of the Pilitza, however, the appearance of the land and the face of the country improve: and, as we proceed southward to the Vistula, the surface becomes more undulating, and the soil stronger and more tenacious. In this quarter there are extensive tracts of clayey loam, requiring three or four horses to plough it, and yielding, when tolerably well managed, excellent crops of wheat and oats. Where, in this district, any thing like a system of rotation is adopted, the crops are very heavy.

Some of the estates belonging to the nobility of the highest rank are of enormous extent; and, not long since, those of Prince Czartoryski and Count Zamoyski, taken together, occupied a space nearly equal to half the extent of England. In the times of the republic, the former contributed 20,000, and the latter 10,000 men to the army. Owing, however, to the practice of dividing the land equally among the children, unless a majorat be established in favour of the eldest son, which is sometimes the case, much of it is possessed in smaller allotments. These, however, we should still call large, for they mostly vary from 5,000 or 6,000 up to 30,000 or 40,000 acres each. The rent and price of land is generally low; depending much more on the number of peasants than the extent of the farm. The crown-lands, comprising 1-3d part of the whole surface, or about 10 million acres, include perhaps 2 million acres of wood, the remainder being chiefly arable land leased to tenants, who, in consequence, acquire right to the services that may be legally demanded from the peasantry. The tenants of the crown are exempted, as well as their peasants, from some taxes, to which the other occupiers of land are subject, and, in consequence, the crown estates are better stocked with peasants. Lands belonging to private individuals are rarely, indeed, ever let, except for services to be performed on the other parts of the same estate; and the value of the land is determined not by the amount of the money rent it will bring, but by the amount of subsistence it affords, or the number of individuals it will maintain in an average state of comfort, according to the customs and habits of the society. Formerly the whole lands of the republic were the property of the nobility or gentry, and could not be held by any one else. The possession of land was, in fact, of itself a proof of nobility; and the owner of an estate of 3 acres in extent voted in the elections of nuncios, and, in respect of political rights and privileges, was on a level with the richest nobleman in the country. But this state of things is now wholly changed. Landed property is no longer the appanage of a particular class, but may be indifferently held by nobles, burghers, and peasants.

The most numerous class of cultivators are peasants, who are a species of *quasi* proprietors of the lands they occupy, holding them under condition of working a stipulated number of days in each week on their lord's demesne, and paying him, in addition, specified quantities of poultry, eggs, and yarn. The extent of their holdings varies according to the quality of the land, the quantity of work to be performed, and of payments in kind to be made. On a large property examined by Mr. Jacob, the peasants had each about 48 acres of land, for which they were bound to work two days a week with a pair of oxen. If their further labour was required, they were paid at the rate of 3*d.* a day for two days more, and, if beyond that number, they received 6*d.* a day. On another property, the peasants had about 36 acres, for which they worked 2 days a week with 2 oxen; when called upon for extra labour, they were paid 6*d.* a day for themselves and their oxen for the next 2 days, or, without the oxen, 3*d.*

Under the republic, the Polish peasants were slaves, and the absolute property of their masters. Down to 1768, a lord who had killed his slave was merely amerced in a small fine; and though in that year the offence was made capital, such an accumulation of evidence was required to prove the fact, that the enactment was rendered quite nugatory. It was customary to make the slaves work five days a week on the estates of their lords; the latter also might seize on whatever wealth the slaves had accumulated, might inflict on them corporal punishment, and might sell them as if they had been so many head of cattle. The boasted freedom of Poland was, in truth and reality, merely the licence of the gentry to trample under foot the mass of the people, to browbeat their sovereign, and sell their votes. It is due, however, to the nobility to state that some amongst them, as the Zamoyskis, the Czartoryskis, and others, perceived the miserable consequences of such a state of society, and were most anxious for the improvement of the peasantry on their estates, of whom they emancipated considerable numbers. Generally, however, the Polish gentry were not inclined to establish or give efficacy to any regulations in favour of the peasantry, whom they scarcely considered as belonging to the same race of beings as themselves, or as entitled to the common rights of humanity. The Polish peasantry, at the dismemberment of the republic, were in the lowest state of degradation, being at once ignorant, indolent, addicted to drunkenness, poor, and improvident in the extreme.

The servitude of the peasants was modified by the constitution of 1791, and it was wholly abolished in the grand duchy of Warsaw, nearly identical with the existing kingdom, in 1807, the labour and services due by the peasants to their lords having been since regulated and defined by law. Owing to the ignorance of the peasantry, the influence of this great and salutary change was for a lengthened period less considerable than might have been supposed. Owing to the powerful influence of old habits, but few peasants improve the land, their conduct being most frequently marked by carelessness and a want of forecast. This, however, is by no means uniformly the case: there have been many instances of accumulation; indeed, several of the peasants have become great

Digitized by Google

proprietors, while others have hired large quantities of land. But it will require the lapse of a lengthened series of years before any very general change be made in the habits and condition of the bulk of the people.

Speaking generally, the houses of the Polish peasantry are miserable hovels. They are all built of wood; even those of the better class have merely the ground-floor. On the exterior they are, in every point of view, humble, very often mean in appearance: the interior is occasionally somewhat better. There are usually 2 or 3 ordinary rooms, whitewashed, though only one serves, for the most part, as a sitting-room. The floors are sometimes of earth only, but more frequently planked. A bed stands almost always in every room. The villages, which are of the most wretched description, are thinly scattered, rather along the skirts than in the midst of the forests, and sometimes in vast bare heaths, where no other object is to be seen. They consist of from 10 to 50 miserable huts, rudely constructed of timber, and covered over with straw, turf, or shingles; and afford so imperfect a shelter, that the inhabs. are glad to stop up the chimneys in winter, and to be half smothered with smoke, rather than die of cold. Each of these huts consists generally of only one apartment, with a stove, round which the inhabs. and their cattle crowd together. Bad as these villages are, they stand far apart, and travellers may often go 10 m., even in the clear part of the country, without seeing one, or indeed beholding any human habitation. The common diet of the peasantry is cabbage; potatoes sometimes, but not generally; pease, black bread, and soup, or rather gruel, without the addition of butter or meat. Their chief beverage is the cheap whiskey of the country, which they drink in quantities that would astonish the best customers of the gin-palaces of England. Their houses generally have little that merits the name of furniture, and their clothing is at once coarse and disgustingly filthy. The condition of the agricultural labourers depends much on the character of their lords, and upon the more or less embarrassed state of the property on which they may be settled. On the estates of opulent and enlightened landlords, it is wholly different from what it is on the estates of those of an opposite description, and may indeed be said to be decidedly comfortable.

The common course of crops is the old system of a whole year's fallow, followed by winter corn, and that by summer corn, and then a fallow again, so that 1-3rd part of the land bears nothing. The winter crop, in the N. of Poland, consists of wheat and rye, the latter being to the former nearly as 9 to 1, the little manure that is preserved being laid out on the wheat land. In the S. part of the kingdom, the wheat bears a larger proportion to the rye, amounting, on the more tenacious soils, to 1-5th, and in some cases to 1-4th part, or upwards. On a well-managed farm in the prov. of Lublin, the quantities of seed and produce are said by Mr. Jacob to have been as follows: Potatoes, about 20 bushels to the acre planted, and about 200 bush. raised; wheat, 2 bush. sown, and from 16 to 20 reaped; rye, 2 bush. sown, and from 12 to 15 reaped; buck-wheat, 3 bush. sown, and from 10 to 15 reaped. The barley and oats scarcely yield four times the seed. Manure is applied after potatoes for the wheat, the former having the benefit of fallowing. This farm was one of the few in which all the labour, except that of the oxen and their drivers, was paid for in money, and not in produce. The common plan of thrashing is to give the thrasher a certain proportion of the corn, varying, according to circumstances, from the 14th to the 18th bushel. In the generality of farms, the increase is considerably less than the above; the average produce of wheat being estimated at not more than 14 or 15 bushels; rye, 10 or 12; barley, 14 or 16; and oats and buck-wheat, from 8 to 12 the acre; or at not more than half the average produce of similar crops in England. In the S. parts of Sandomir and Cracow the crops are more than usually heavy; but they are celebrated more for the excellent quality of their corn than for its greater produce. In Sandomir, a narrow district about 60 m. in length, extending along the Vistula, produces the heavy and fine grain known in London as Dantzic white wheat, but the average growth is rarely beyond 20 bushels an acre.

The stock of cattle is small in proportion to the extent of land and the number of the inhabs. The Polish horses, formerly held in high estimation, have much degenerated, and a good breed is to be met with only in a few studs. A miserable race of colts is employed to transport merchandise, and field labour is almost wholly performed by oxen or cows. The latter are small, and generally kept in bad condition, both as to food and cleanliness. They are mostly stall-fed, but, from negligence, yield very little butter, and no good cheese. The common breed of the country may be worth from 27*s.* to 30*s.* a head; but considerable numbers of a superior breed are annually imported from the Ukraine, which may be worth 3*l.*, or upwards, a head. Previously to the late revolution, the total number of sheep in Poland was roughly estimated at about 3 millions; but though the country be extremely well adapted for sheep breeding, the Polish breeds were greatly inferior to those of Saxony, and there were very few flocks of fine-woolled sheep. Latterly, however, the Polish wool has improved very much in point of quality; and is now sent in large quantities to the markets of Leipsic, Berlin, and Breslau, where it sometimes brings a very high price. Hogs, though not very numerous, are of a good breed, originally from Hungary.

The burdens laid directly on the land are not very heavy. Tithes are moderate, and principally compounded for at fixed rates. A small sum is levied in each district for the repair of roads, bridges, and other local purposes; but that and the land-tax do not exceed 25 per cent. on the presumed annual value of the land, which is usually far below its real value. The other taxes fall equally on the different classes of the community. That on beer is let to farm by the government to the brewers. Heavy duties are laid on foreign commodities, such as sugar, coffee, and wine. The great mass of the population cannot, however, afford to purchase such luxuries, but content themselves with honey, dried chicory, and whiskey. The forests are highly important, and in the govs. of Augustow and Plock they cover more than a third part of the surface; though in some of the other govs. they have been much neglected, and wantonly cut down, especially in the gov. of Cracow, where, however, the place of wood-fuel is supplied by coal. Scotch pine, black fir, alder, aspen, oak, beech, ash, maple, linden, and elm are the principal forest trees, and the Polish oak and fir timber are decidedly preferable to that of America. Most of the larger forests belong to the crown, and are felled in portions annually, so as to cut them every fifty years. (Jacob's Report on the Agric. of Poland.)

Among the wild animals may be specified the bison (Pol. *Zubr*), found in the vast forests of the prov. of Plock, traversed by the Narew. The Emperor Alexander I. prohibited the chase of

Digitized by Google

the bison, of which, perhaps, the only remnant in Europe is now to be found in Plock and the adjoining Russian prov. of Bialystock. The other wild animals include the elk, roebuck, wild boar, badgers, foxes, and hares, the skins of which last form articles of export.

Minerals are more numerous and valuable than might have been expected in so flat a country. Bog iron is found almost everywhere, but the principal mining districts are in the S., in the govs. of Cracow and Sandomir. Coal is raised in considerable quantities at Bendzine, Reden, and Niemcy. Zinc, which is exported in considerable quantities, is found in the vicinity of Cracow; lead at Olhusz; and copper at Kielce. Iron of excellent quality is also mined in Sandomir.

The domestic *manufacture* of woollen and other stuffs is universal throughout Poland, almost every agricultural family having a loom for the manufacture of the coarse cloths required for their consumption. In 1829, the woollen cloth made in the country was estimated at 7,000,000 Polish ells, worth upwards of 70 millions fl., about a tenth part of which was sent into Russia. During the disturbed period which followed, the production of Polish woollens sank to one-third of what it had previously been, but it has lately revived in consequence of the importation of Polish cloths into Russia, duty free, where they are in extensive demand for the clothing of the troops, and other purposes. They are, also, sent in considerable quantities to Kiachta, on the borders of Chinese Tartary. The textile manufactures of the kingdom are confined to certain districts of the provinces of Warsaw and Kalisz, and principally to the towns of Lodz, Tomazow, Zgierz, and Ozorkow, where the population consists chiefly of Germans. The cloths and other woollen manufactures produced in the kingdom are of an inferior quality, and the greater portion is employed in the kingdom itself, the remainder finding its way into the interior of the Russian empire. In the year 1860 the number of persons employed in woollen, cotton, and linen manufactories is stated to have been 36,677, whilst the value of the articles produced is given at 13,731,834 roubles. Leather is the manufacture next in importance; and then follow paper, bleached wax and wax candles, alum and other chemical products, glass, printing types, jewellery, and carriages. Generally, however, these articles are produced on a very small scale; and, notwithstanding the cheapness of labour, they are mostly, from the want of skill on the part of the workmen, at once high-priced and inferior. Poland, in fact, is an agricultural country; and, except a few of the more bulky and coarser articles, it would, were the citizens permitted to resort to the cheapest markets, derive almost all its manufactures and articles of luxury from other countries, in exchange for corn, wool, timber, tallow, flax, spirits, and such like articles. Spirits are distilled in every village from rye and potatoes, but their sale is still, as formerly, a manorial right, each lord of a manor having the exclusive sale of spirits within his domain. There are breweries in Warsaw, and in some other large towns; and mead, and drinks made from raspberries, cherries, &c., principally in the S. provs., are favourite beverages of the people. Of late years several beet-root sugar factories have been established.

The *trade* of Poland is almost wholly in the hands of the Jews. The internal commerce is carried on chiefly by means of fairs, at which, also, a considerable portion of the foreign trade is conducted. The latter is principally with Russia, Prussia, Austria, and Germany. The subjoined table gives the value of the exports of Poland (after the Official Report of Colonel Staunton, British consul general), in each of the years 1862 and 1863:—

Articles of Export	Value in Pounds Sterling	
	1862	1863
Horses	19,228	—
Horned Cattle	6,531	—
Swine, Sheep, &c.	6,766	—
Wheat	940,204	12,382
Rye	665,029	14,926
Other Grains	31,550	—
Oil Seeds	3,379	2,658
Wool	399,349	203,079
Horsehair	3,047	460
Cow Hair	570	—
Bristles	8,982	1,939
Rags	294	318
Spirits	5,979	—
Tallow	103	3,671
Flax	4,890	744
Hemp	7,601	2,266
Hardware	23,185	—
Zinc	23,614	—
Pig Iron	2,739	—
Furs	44,591	—
Silk, Raw	62,661	—
Turpentine	52,400	35,964
Timber	301,412	—
Firewood	6,601	—
Planks	24,361	—
Staves	5,786	—
Miscellaneous	224,220	24,443
Total	2,882,220	302,823

The immense diminution of the exports in 1863 was caused by the great insurrection of the latter year, which partly destroyed the trade and commerce of the country.

The principal imports are manufactured articles and colonial goods. In 1862, the total value of the imports into Poland was 3,713,139*l.*; but it sank to 751,061*l.* in 1863. (Report of Colonel Staunton.)

The establishment of a great line of railway, connecting Warsaw with St. Petersburg, Berlin, and Vienna, has done much to raise the trade of Poland within the last few years. In the districts not served by railways goods are conveyed in summer by heavy waggons, and in winter by sledges; but the roads are generally bad, and during the late insurrection were much cut up; latterly, however, government has been exerting itself for their improvement. Steam navigation is but in its infancy, and merchandise is forwarded down the rivers by flat-bottomed boats to the Prussian ports. There is a great commercial road from the SW. angle of Poland to the Baltic; and the canal of Augustow, connecting the Narew and Vistula with the Niemen, is continued to the Baltic by the Windau canal. The canal of Augustow is 96 m. in length, from 5 to 6 ft. in depth, and of sufficient breadth for two large boats to pass each other with ease. It has 17 locks, and several convenient basins in different parts of its course. It was wholly completed between 1821 and 1829, and is now the means of an active traffic.

Accounts in Poland are kept in *zlots*, *groschen*, and florins: the florin = about 9*d.*, is divided into 30 gr. The Polish lb. is about equal to 14 oz. avoird.: the ship pound = 416 lbs.

Government.—Previously to 1831, Poland had its two legislative chambers, those of the deputies and the senate; but since the unhappy attempt at a revolution that then broke out, and the still more

Digitized by Google

fatal events of 1863–64, Poland is governed nearly in the same way as the other portions of the Russian empire. The council of administration for the kingdom consists of 3 directors-general (of the interior, justice, and finance), a comptroller-general, and other persons appointed by the sovereign. The reports of this council are submitted to the emperor by a secretary of state for Poland residing in Petersburg. There is also in that capital a department for Polish affairs, established since 1832, to which the government of Poland is confided. The legislative power is vested in the sovereign, and the proposed laws for this kingdom are submitted for his sanction by the Russian council of state. The local administration is exercised by civil governors, with the same powers as those established in the different govs. of Russia.

The civil and commercial codes at present in force are, for the most part, the same as in France: the criminal code is modelled on that of Prussia and Austria. Personal and religious liberty are nominally guaranteed; and those who do not interfere with politics are as secure in Poland as anywhere else. But those who wish to enjoy this security must have a care not to find any fault with any action of the government. The press is under the control of censors, who are stricter here than even in Russia. Justices of the peace decide in civil causes up to the amount of 500 florins; above which the latter come before the tribunals of original jurisdiction in the caps. of the several governments. At Warsaw, besides a court of appeal, there is a supreme court of cassation, and commercial tribunals are established in all the principal towns. Criminal causes are tried in separate tribunals, of which there are 4 in the kingdom. Political offences come under the cognisance of a council of war, or a commission specially appointed.

Religion.—Until lately, upwards of three-fourths of the Poles belonged to the Rom. Cath., or the United Greek Church, the Greco-Russian communicants being but few in number. But of late the Russian government has, by every means, been endeavouring to shake the spiritual dependence on the court of Rome, not only of the Poles, but of the United Greeks throughout the empire; and its measures, in this respect, appear to have been attended with much success. Until 1832, the Greco-Russians had no prelate in Poland; but at that period an archimandrite was appointed, who resides at Warsaw. The bishop of the United Greek Church resides at Heline, in Lublin. The Rom. Catholics have an archbishop and eight bishops, nominated by the Pope on the recommendation of the Emperor of Russia. There are a number of convents possessing territorial revenues; but the secular clergy receive a regular stipend from the government, the landed possessions formerly belonging to them being now public property. The parish priests, however, receive tithes, the amount of which is sometimes very considerable. The Lutherans and Calvinists, amounting together to about 220,000 persons, are principally Germans. There are a few Mennonites and Moravians, and some Mohammedans.

Public Instruction.—Previously to 1830, education was scarcely diffused at all, except among the nobility and upper classes residing in the towns, and the total number of persons receiving instruction at that period is said not to have exceeded 16,000, or about 1 in 260 of the pop. After the suppression of the insurrection, the schools were shut for several months, and when reopened, were organised upon the same plan as those of Russia. Private schools are subject to the same inspection on the part of the government as public schools. In 1838 an order was issued by the Russian government, directing that there shall be a teacher of the Russian language in every primary school; and that all children attending such schools shall be obliged to learn the Russian language: it was also, at the same time, ordered that no individual should be employed as a tutor unless he possessed a testimonial signed by the proper authorities, certifying his ability to give instruction in the Russian language; and that no person unacquainted with Russian should be promoted to any civil or military employment.

The Polish army, which formerly amounted, in time of peace to 35,000 men, has, since 1863, been completely amalgamated with that of Russia.

The Poles are a remarkably fine race of people, being well formed, strong, and active. In their general appearance they are said to resemble the Western Asiatics rather than the Europeans, and are, most probably, of Tartar origin. The gentry are haughty and brave, but, at the same time, frank and generous. The peasantry, however, bowed down by continual oppression, are cringing and servile, their whole behaviour evincing the state of abject servility from which they are now being emancipated. The nobility are very numerous in Poland, amounting at present to not less than 283,420 individuals. According to the old laws of the republic, the nobles were *terrigenæ*; every person who possessed a freehold estate, how small soever, or who could prove his descent from ancestors formerly possessed of such an estate, and who had not lowered his position by engaging in any sort of manufacture or commerce, was a nobleman or gentleman, the terms being in Poland synonymous. The gentry were all held to be equal to each other, the titles of prince and count, which some of them enjoyed, not being supposed to add anything to their real dignity. Under the republic the nobility were everything, and the rest of the people nothing. The former were the absolute lords of their estates, and of the boors by whom they were occupied. They enjoyed the royal privilege of maintaining troops and constructing fortresses; and they only could elect the sovereigns. No noble could be arrested without previous conviction, except in cases of high-treason, murder, or robbery on the highway, and then only provided he were taken in the fact. His house was a secure asylum to all to whom he chose to extend his protection, whatever might be their crimes. Even his vassals could not be arrested, nor their effects seized; they were exempted from all payment of tolls and other direct duties; and though the king might bestow titles, he had no power to create a nobleman or gentleman, that being the exclusive privilege of the diet. However, this state of things has been wholly changed. Under the government of Russia, Austria, and Prussia, the privileges of the nobles have been suppressed; they can no longer trample on their inferiors, nor commit offences without subjecting themselves to the full penalty of the law; and a poor gentleman no longer considers it a degradation to engage in some department of industry.

Though modernised in a considerable degree, the richer Polish nobles continue to live in large castles, in a state of rude hospitality, entertaining great numbers of their dependents and such strangers as may happen to visit them. At these feasts the practice of sitting below the salt is still kept up, the best dishes and the best wines being appropriated by the *élite* of the guests.

Jews are more numerous in Poland than in

Digitized by Google

any other European country, having amounted, at the census of 1861, to near half a million. They are in the almost exclusive possession of the commerce of the country; they, also, are the great manufacturers and sellers of spirituous and fermented liquors; advance money on lands and goods; are the only jewellers and silversmiths; and carry on all pecuniary dealings. Those in the towns are mostly all burgesses, and they may be said to engross all the most lucrative businesses. But notwithstanding all this, the majority of the Israelites are extremely poor. They seem, also, to be in a lower state of civilisation than any other class. Even the richer individuals, though they occupy the best houses in the towns, appear to care little for cleanliness or comfort; and the lower orders live in a state of filth and discomfort that would be intolerable any where else.

There are in Poland many instances of longevity, and, on the whole, the country may be said to be healthy; but the people are, notwithstanding, especially liable to endemical diseases, such as small-pox and fevers, which frequently make great havoc. Among the diseases peculiar, or nearly so, to Poland and Lithuania, the *plica polonica* is the most remarkable. This is a disease of the head, which terminates by affecting the hair, which it dilates, softens, and clots into one undistinguishable mass. This disgusting malady spares neither age nor sex, gentry nor peasants, though it be more frequent among the latter than the former. Various theories have been formed to account for its origin: most probably it is occasioned by the bad water, unwholesome food, and filth of the people.

History.—The history of Poland commences from the 10th century. In 1139, Boleslaus, under whom Christianity had been introduced into the country, divided the kingdom among his four sons, which was the source of a lengthened series of civil wars, and of all sorts of disasters. At length these different portions were united under one sovereign, in 1296. The reign of Casimir the Great, which began in 1333, and terminated in 1370, is the most brilliant in the Polish annals; still, however, the foundations were laid in it of that anarchy that destroyed the kingdom. Casimir, having no children of his own, and being anxious that the crown should devolve, at his death, on his nephew Louis, king of Hungary, in preference to the legitimate heirs, obtained, for that purpose, the sanction of a general assembly of the nobles, and Louis agreed to the conditions under which they offered him the crown, establishing, in this way, a precedent for the like interference on future occasions. On the death of Louis the grand duchy of Lithuania was united to the crown by the marriage of Jagellon, its grand-duke, to the daughter of Louis, who had succeeded to the throne. The house of Jagellon continued to occupy the Polish throne for about two centuries; but at each change of a sovereign an assembly of the nobles or *diet* was held, at which the new sovereign was formally elected to the throne. On the death of the last of the Jagellons, in 1572, the throne of Poland became, substantially, as well as formally, elective, and it was called not a kingdom but a republic. Henceforth, on the death of a sovereign, the nobility or gentry repaired in vast numbers, sometimes to the amount of 100,000, on horseback, and armed, with crowds of attendants, to a sort of camp in the neighbourhood of Warsaw, to elect his successor, who had to subscribe, and make oath to observe, the *pacta conventa*, or conditions under which he had been elected. These were such as to reduce the royal authority within the narrowest limits, to secure and extend the privileges of the nobility and clergy, and to perpetuate the degradation of the people, who, being slaves in the fullest extent of the term, were not supposed, in fact, to have any legal existence. The famous John Sobieski, the deliverer of Vienna, elected to the throne in 1674, was the last of the great monarchs of Poland. But in the latter part even of his reign the vices of the Polish constitution, and their fatal operation, became obvious; and they thence continued to increase in number and virulence till its total subversion.

Exclusive of the diets for the election of the sovereigns, ordinary diets were held, at least, once every two years, at which all matters connected with the government of the country were discussed and decided upon. It is easy to see, from what has been already stated, that this form of government could not fail to produce great party contests and disorders, and that it must have afforded every facility to the surrounding powers for acquiring a preponderating influence in the diet. Probably, however, the abuses already noticed might have been repaired, but for the principle first introduced in 1652, that no decision could be come to upon any matter submitted for consideration, unless the diet were unanimous. Hence the singular and extraordinary privilege of the *liberum veto*, by which any single member of the diet was permitted to interpose his absolute veto, and, by doing so, could nullify its whole proceedings. This absurd privilege, which allowed the whim, caprice, or bad faith of an individual to prevent the adoption of any measure, however necessary and however generally approved, was, for a lengthened period, regarded by the Poles as the palladium of their liberties. The whole powers of the state were during this period engrossed by the nobles, or gentry, many of whom, though enjoying the same political rights and franchises as the others, were miserably poor. In consequence, corruption, intimidation, and such arts had full scope in the Polish diets, particularly in those held for the election of sovereigns; and latterly the crown was, in fact, either sold to the highest bidder, or the election was decided under the influence of foreign force.

The partition of Poland was first proposed by the Swedes in the reign of Casimir V., a short while previous to the election of John Sobieski, as the only method by which the disorders that agitated the country could be put an end to, and the inconvenience thence arising to the surrounding states be obviated. (Ruhlhière, 'Anarchie de Pologne,' i. 68.) But it was not till more than a century after that the first partition was agreed upon, in 1772, by the emperor of Austria, the empress of Russia, and the king of Prussia, by which about a third part of the kingdom was dismembered, and added to the dominions of the partitioning powers. But it was not to be supposed that having once begun to share in so rich a spoil, these powers would rest satisfied with this acquisition. The pretexts for farther interference still continued undiminished. Poland, as before, remained a prey to all sorts of disorders, and the Russian ambassador, and not the king, was the real sovereign. In 1791 the majority of the nobility and gentry then assembled in a diet, which had been made permanent, being desirous to raise their country from the miserable state into which it had fallen, and, stimulated by the events connected with the French revolution, drew up the *project* of a new constitution on a more liberal and broader basis, abolishing the *liberum veto*, and making the crown hereditary, on the demise of the king, in the Saxon family This constitution was accepted by the king; but the great bulk of the nation did not,

Digitized by Google

and could not, take any interest in the change; and the government were wholly without the means of supporting the new order of things. Russia had little difficulty in fomenting fresh disorders; and the unfortunate Poles, with an imbecile sovereign, without forces, and abandoned and betrayed by their pretended allies, were again compelled to submit to a fresh dismemberment of their country. Provoked by these repeated indignities the Poles, under Kosciusko, rose in rebellion in 1794. But their means were totally inadequate to the struggle in which they had engaged; after displaying prodigies of valour, Kosciusko was defeated and taken prisoner (10th October, 1794), and Praga, the suburb of Warsaw, being taken by storm, that city forthwith surrendered. There being no longer any obstacle in the way, a dismemberment of the remaining territories of the republic took place in 1795; and, though its convulsive struggles for a new national life have lasted to the present day, breaking forth, again and again, in revolts and insurrections, Poland was then finally obliterated from the map of Europe, leaving nothing but the shadow of a name.

POL-DE-LEON (ST.), a sea-port town of France, dép. Finisterre, cap. cant., on the Channel, 10 m. NW. Morlaix. Pop. 6,704 in 1861. Though ill-built, it is clean, well paved, and remarkable for its antique edifices. Its cathedral, a structure of the 15th century, has some excellent carving; and a tomb, said to be that of the first Breton king. The church of Kreizker, built in the 14th century, has a spire 394 ft. in height, and one of the handsomest in France. St. Pol has some trade in cattle, horses, linen, and hemp, but to no great extent.

POLIGNY (an. *Castrum Olinum*), a town of France, dép. Jura, cap. arrond., on elevated ground, 13 m. NE. Lons-le-Saulnier, on the railway from Bourg to Besançon. Pop. 5,401 in 1861. The town consists principally of 4 long parallel streets, and is well built, clean, and ornamented with several handsome fountains. Among its public edifices is a well-constructed slaughter-house. Poligny was formerly a place of importance, and a favourite residence of the sovereigns of Burgundy. It has a few manufactures of common earthenware, saltpetre, and glue; and is a subprefecture, though the superior courts for the arrond. sit at Artois.

POLTAVA, a gov. of European Russia, lying along the E. side of the Dniepr, by which it is separated from the governments of Kherson and Kieff, having the gov. of Tchernigoff on the N., and those of Kharkoff and Ekaterinoslaff on the E. and S. Area estimated at 19,000 sq. m. Pop. 1,819,110 in 1858. Surface quite flat; soil excellent. In some parts there is a scarcity of wood. Besides the Dniepr, the principal rivers are its affluents, the Vorskla, Piriol, and Sula. This and the surrounding governments constitute what may be called the granary of Russia. It is one of the best cultivated districts of the empire: the return of the corn crops is said to be as 6 to 1, the total produce being about 6,500,000 chetwerts, of which about 1,500,000 are exported. The grazing grounds are excellent, affording pasturage for large herds of the fine Ukraine breed of oxen, and for immense flocks of sheep, the breed of which has latterly been much improved. Some peasants have above 100 bee-hives. Manufacturing industry has not made much progress; but there are fabrics of cloth and linen, with numerous distilleries, and establishments for the preparation of tallow and candles. Large quantities of corn, tallow, and other products are annually sent from this government to Odessa, and oxen to Moscow and St. Petersburg.

POLTAVA, a town of Russia, the cap. of the above gov., on the Vorskla; lat. 49° 35′ 4″ N., long. 34° 41′ 15″ E. Pop. 21,276 in 1858. The town stands on an eminence, and is built principally of wood, with broad and straight streets. There is a good square, with brick houses, embellished with a granite monument in honour of its deliverer and the regenerator of Russia, Peter the Great. It is surrounded by a rampart, and has a cathedral, gymnasium, and convent, with three great fairs annually, and a considerable commerce.

Charles XII. of Sweden having besieged this town in 1709, Peter the Great marched to its relief; and in its vicinity, on the 27th of June of the same year, was fought the famous battle of Poltava. The Russians gained a complete victory. The Swedish army was entirely destroyed; it lost above 9,000 men left dead on the field of battle, and from 2,000 to 3,000 made prisoners in the pursuit; while the residue, consisting of about 14,000 men, under General Lewenhaupt, after escaping from the battle, were compelled to lay down their arms and surrender on the 12th of July. Charles, with only a small escort, effected his retreat across the Bug, and took refuge in Turkey. This great victory established the power of Peter on a solid foundation, and secured not merely his empire, but the success of his vast projects and plans for the civilisation and improvement of his people.

POLYNESIA, 'the region of many islands,' a collective term used by geographers to designate the numerous groups of volcanic and coralline islands scattered over a great part of the Pacific, but especially between the tropics, extending eastward from the Philippine Islands and New Guinea to the coast of America. Supposed aggregate pops., 1,500,000; but all calculations of this kind are merely conjectural, as there are few or no data. The equator forms a convenient dividing line between these groups, which may accordingly be comprised under the heads of N. and S. Polynesia, as follows, the order being from W. to E.

Names of Insular Groups	Situation	
	Lat	Long.
I. N. Polynesia.		
Pelew Islands about	8° N.	135° E.
Ladrone „ . .	17	147
Caroline „ . .	7 —17°	150 —170°
Radick „ . .	6 —10	164 —172
Sandwich „ . .	20	156 W.
Gallapagos „ . .	1	92
II. S. Polynesia.		
Admiralty Islands .	2 S.	148 E.
New Ireland, New Britain, and New Hanover . .	6 —9	152
Louisiade, little known	10	148 ?
Solomon's Islands .	8	156 —164
New Hebrides and New Caledonia	19 —22	164 —170
Q. Charlotte's Islands	12	166 —170
Friendly „	15 —21	178 E.—165 W.
Navigators' „	13	173
Society „	13 —21	158 —143
Dangerous Archipelago	12 —19	144 —132
Marquesas „	8 —11	140
Pitcairn Island . .	20	133
Eastern „ . .	27	109

The whole of Polynesia may be considered as a series of submarine mountain ranges; for no portion of the earth's surface has more numerous inequalities, and nowhere, except in America, have the chains so marked a course from N. to S. Indeed, all the archipelagos have, more or less, this

Digitized by Google

direction, and it not unfrequently happens that the small chains are individually terminated by an island of larger size than the others with which it is connected. Many of the larger islands, and particularly those which shoot up to a considerable elevation from the sea, consist of basalt, as well as other igneous formations, and in many of them are distinct traces of volcanic action, with a few active volcanoes. To this class belong the Friendly Islands (the largest of which, called Otaheite, has a mountain rising to the height of 10,000 ft. above the sea), the Marquesas, and Sandwich Islands, in the last of which are several, both extinct and active, volcanoes, rising from 12,000 to 16,000 ft. above the sea. The desert group of the Gallapagos is likewise in a state of igneous action, and the whole is a mere mass of lava and similar productions. The numerous small islands that stud the Pacific S. of the equator, and W. of the Friendly Islands, and particularly those that rise but a short distance from the level of the sea, are based on reefs of coral rock. Of those examined by Captain Beechey, none were more than 30 m. in diameter; they were of various shapes, chiefly formed of living coral, or at any rate encompassed by a reef of that substance. Most of them have lagoons in their centres, the bottoms and sides of which are likewise formed of coral; and the generally circular form of these islands, the existence of these lagoons, and the shelving conical form of the submarine mountains, have led to the supposition that they are nothing more than the crests of submarine volcanoes, having the rims and bottoms of their craters overgrown with coral. It is also well known that the Pacific is a great theatre of volcanic action, and every island, yet examined in Polynesia, consists either of volcanic rocks or coral limestone, and, in many instances, of basalt and lava, having a girdle of coral. (Lyell's Geology, iii. 226–229.) The formation of coral, which, according to Captain Beechey, is very gradual, ceases as soon as it reaches the surface of the water; but it serves as a basis for a vegetable soil, which in these regions is soon covered with plants, cocoanut and other trees. The larger islands of Polynesia are indented with deep bays, furnishing tolerably good harbours for shipping; but the circumference of the largest is less than 200 m., so that their extent does not admit of the formation of any important lakes or rivers. By far the larger portion of Polynesia is between the tropics; but the small extent of the islands procures for them the temperature of the ocean, and a succession of light sea and land breezes. Hence the heat never becomes oppressive, even to Europeans. Hurricanes and earthquakes are of rare occurrence.

The numerous islands of the Pacific afford an extremely diversified vegetation; and among the many plants covering their surface are some of high utility for human support, especially the bread-fruit tree (a favourite article of food among the islanders), cocoa-nut, yam, the root of the *Arum esculentum*, the banana, plantain, and sugar cane, which last grows naturally in the Sandwich Islands, and succeeds better than in any other part of the world. A native chestnut, called *Ruta* (*Tuscarpus edulis*), furnishes the natives with a sweet nut, that forms an agreeable substitute for bread-fruit; besides which, the Ahia (*Eugenia malacconsis*) bears a pulpy fruit, shaped like an apple. The Ti-root (*Dracœna terminalis*) furnishes an inferior spirit, called *Ava*, the preparation of which is pretty well known by most of the islanders, and has produced very demoralising effects. The use of foreign spirits, however, has, in the groups best known to Europeans, almost superseded the necessity of drinking this nauseous stuff. The tropical productions of the American continent have been successfully introduced by European navigators and missionaries; so that many of the islands, besides their indigenous productions, bear an abundance of oranges, citrons, shaddocks, pine-apples, guavas, figs, and Cape mulberries. The vine also was introduced, but was destroyed by the natives in their wars: fresh plants have more recently been imported, and thrive well in some of the islands. The growth of corn has been more than once attempted, without success, owing more, however, to the imperfect means of tillage than the unfitness either of the soil or climate. Pumpkins, melons, cucumbers, cabbages, and kidney-beans flourish better, and with less trouble, than any other foreign vegetables. The hills of the more elevated islands are clothed with forests of stately trees; the most valuable of which are the *apapa* and *faifai*, which yield excellent timber for canoes, and the candle-tree (*Aburites triloba*), the oil of which is used for domestic illumination. The principal trees growing on the plains are the tamanu (*Calophyllum inophyllum*), and the *Hibiscus tiliacus* (highly valued as materials for furniture, canoes, &c.), the Chinese paper mulberry (*Morus papyrifera*), and the sandal-tree, the timber from which last is exported from the Sandwich Islands to Europe and China.

The fauna of Polynesia is characterised, like that of Australia and its surrounding islands, by the absence of beasts of prey, and, indeed, all the larger animals. Hogs, dogs, rats, and lizards were the only quadrupeds originally found on the islands. The native hog is different from the European breed since introduced, and has now almost disappeared: the present breed is reared in great numbers, and pork constitutes the favourite food of the natives. The flesh of the dog is also esteemed a luxury, especially by the Sandwich islanders. Rats were occasionally eaten uncooked by the Friendly islanders, but that practice has been discontinued. Cats have been domesticated in most of the houses. Horses, asses, horned cattle, goats, and sheep have since been added, and thrive exceedingly well. The oxen are a fine breed, chiefly imported from New South Wales. The horses come from S. America, and, being used only for the saddle, are never shod. Among the indigenous water birds may be noticed the albatross, tropic bird, several kinds of petrels, herons, and wild ducks. Woodpeckers, turtle-doves, and pigeons are common; besides which, the parroquet (of the species *trichoclossus*) is abundantly distributed over all the islands; and in most of them the domestic fowl and several species of wild fowl appear to be indigenous. Fish are numerous on the coasts and in the lagoons of all parts of Polynesia: the albicore, bonito, ray, and shark are eaten by the natives; in addition to which the shores abound with a great variety of delicate rock-fish. The freshwater streams also swarm with salmon, eels, and many varieties of molluscous crabs, and with turtles, caught on the coral rocks. Among the whales that frequent the coasts of Polynesia, the largest and most valuable is the *cachalot*, or sperm-whale (the male of which, according to Mr. Bennett, sometimes yields from 70 to 90 barrels of oil, and about 15 barrels of spermaceti), the Cape-whale, hump-back, and black-fish; besides which, porpoises and other small cetaceous animals are extremely abundant. (Ellis's Polynesian Researches, i. 30–77; Moerenhout, i. 367–381; Bennett's Whaling Voyage, i. 36, and Append.)

Polynesia has, of late years, been much visited by Europeans, partly curious to inquire into the

Digitized by Google

habits of people differing essentially from those of the rest of the world, and partly anxious to communicate to them the arts of civilisation and a knowledge of the Christian religion. Its isolated inhabitants were found to possess many interesting features of character, but at the same time to be plunged in the grossest barbarism, sensuality, and idolatry. Cook traced among some of the islanders a confused notion of a supreme intelligent deity; but they almost exclusively worship a number of inferior gods, particularly marine and aërial deities, demons, birds, and fishes. Their rude idols were supposed to exercise a powerful influence; their temples were polluted with human sacrifices; and divination, witchcraft, &c., were practised by the chiefs as political engines for overawing their subjects. (Ellis's Pol. Researches, i. ch. 13, 14.) At the same time, morality, as understood by Europeans, had no existence among this wild people, and the grossest animal appetites had full sway, their gratification being encouraged, also, by their religious institutions. The law of the strongest prevailed: fierce and bloody wars frequently took place between the different insular tribes on the most trivial pretext, and conquest was generally followed by acts of the most horrible cruelty, including the extermination of the vanquished tribe, and occasionally even an indulgence in cannibalism. The female sex, too, was found in as licentious, degraded, and oppressed a state as in the wildest districts of Africa. A kind of civil marriage appears to have been generally observed; but as the sex was too much despised to allow the existence of affection, the wives were repudiated on the slightest pretext, or else neglected for more fascinating concubines. Polygamy was common in nearly all the islands, and in soms groups it is still prevalent. Moerenhout, indeed, tells us, though the statement savours strongly of exaggeration, that some chiefs in the Fidjee islands have as many as 200 wives. (Voyage au G. Ocean, iii. 66–69.) Female virtue was formerly wholly unknown; and, notwithstanding the labours of numerous missionaries during upwards of twenty years, chastity is still extremely rare. Sexual indulgences, and even infanticide, were encouraged by a singular institution called the Areoi Society, the baneful influence of which appears to have been generally diffused over the islands of the Pacific. The missionaries state that about two-thirds of the children born were destroyed by their parents; and, notwithstanding the introduction of Christianity, the practice still prevails.

Cannibalism is still practised in the Marquesas, and some of the other groups. The islanders, however, do not live in the rude independence of savage life, but acknowledge the arbitrary sway of hereditary chiefs whose power is controlled only by those subordinate to them in particular districts. Some attempts have been made to introduce governments of a more liberal character, but they have signally failed.

The habits of the natives are still, in many respects, those of barbarians. Their houses, almost without exception, are confined to a single story; usually, though not always, of oblong shape, and very simply constructed with stakes of the bread fruit-tree, driven into the earth for the purpose of supporting the roof, which is commonly thatched with the leaves of the *Pandanus odoratissimus*, or cocoa-tree. The framework of the walls is composed of bamboo or hibiscus rods, and a large portion of one side is open, being covered only at night with a kind of cloth curtain. The interior comprises only a single apartment, sometimes with a boarded floor; and the furniture consists simply of a few mats and cotton-stuffed pillows spread on the floor, a few low wooden stools, a trough and stone pestle for preparing their favourite paste called *poe* (made from the *Arum esculentum*), some cocoa-nut shells, used as cups, with a fishing-spear, and perhaps a musket. Bunches of fruit hang from the walls; and occasionally may be seen a sow with a litter of pigs occupying a space in one corner, railed off for her accommodation. A separate shed is employed for cooking, and in the more advanced islands a plot of enclosed ground, planted with useful vegetables or favourite flowers, surrounds many of the houses. (Bennett's Whaling Voyage, i. 100, and Moerenhout, ii. 86–89.) Some of these huts are exceedingly large. Mr. Ellis mentions one belonging to a native prince that was nearly 400 ft. in length; and houses 100 ft. in length are by no means infrequent. (Polyn. Researches, i. 175.) The domestic habits of most of the natives are not only unsocial, but irregular, as respects refreshment and sleep, labour and amusement. Their meals are arranged according to their avocations or the supply of their provisions. They usually eat in the forenoon, but their principal meal is in the evening, when, if well supplied, they eat to excess. They rise early, and go late to rest; but the men are often buried in sleep during many hours of the day, while every species of household drudgery is performed by the females, who are oppressed and degraded in the last degree. The habit of frequent bathing prevails throughout Polynesia, and the natives are remarkable for cleanliness, and most of them pay great attention to personal ornament; indeed, says Mr. Ellis (Researches, i. 133), 'their appearance on public occasions is in a high degree imposing.' The hair, in particular, is regarded as an object of great attention by both sexes, and the females commonly appear in loose ringlets entwined with flowers.

The dresses of the islanders originally consisted of cloths woven by the women from the bark of trees, and wrapped loosely round the body, leaving a large part of it uncovered; but, since their connection with Europeans, they have introduced a very droll *mélange* of native and European costume. The practice of tattooing the body prevails more or less through all the islands, though attempts were made a few years ago to abolish this barbarous custom in Otaheite. Tattooing is performed during childhood, and in the Society Islands at the early age of 8 or 10. The patterns vary in the different groups; but nowhere is the body so extensively distigured as in the Marquesas, the inhabitants of which have a most hideous appearance. In some of the islands the face is left in its natural state, the legs, arms, and breast being the only parts tattooed. (Moerenhout, ii. 121–4.) The natives of all the best known groups, except the Sandwich Islands, are, like the half-civilised inhabs. of most tropical countries, extremely indolent, having in fact little occasion for industry, owing to the abundance with which the fruits of the earth are spontaneously produced. Their principal employments are agriculture, fishing, canoe-building, and the manufacture of cloth. Agriculture, as previously observed, is in the rudest state that can well be conceived, the only tillage that the earth receives being by a rude iron-shod stick, about as broad as a European chisel. Fishing is a far more favourite employment, and the methods used are numerous and sometimes highly ingenious. The fish are sometimes caught in circular fences, built up in the shallow parts of their lakes, and simply taken out with a hand net. These enclosures are also excellent preserves for fish not wanted for im-

Digitized by Google

mediate use. Large nets, made of the twisted bark of the hibiscus, are used for fishing salmon; and on most of the islands the natives exhibit a surprising dexterity in the use of the fishing spear. In fact, nowhere are there more skilful fishermen; and considering that before their intercourse with Europeans they were entirely destitute of iron, their variety of fishing apparatus was astonishing. The situation of these islanders necessarily imparts a maritime character to their habits, and much of their attention is, accordingly, devoted to the building and management of their vessels. Their canoes are of various size, as well as shape, and are either double or single. The largest of those seen in the Society Islands are nearly 70 ft. in length, with very high stems and sterns, but only 2 ft. wide. Those used in war are between 40 and 60 ft. in length, firmly built, of rather elegant shape, highly ornamented with carving, and when in use decorated with gay-coloured flags and streamers. In the double canoes (which are merely single canoes lashed together), planks are thrown across to form a kind of deck for the accommodation of passengers, and over it is sometimes spread an awning of platted cocoa-nut leaves. The paddles, made of the hibiscus, are not heavy; but as they are used alternately on each side of the boats, the labour of rowing is by no means inconsiderable. The canoes used in fishing on the reefs are single, and are commonly the excavated trunks of trees; they seldom carry more than two persons. Many of the canoes have movable masts, which are only raised when the sails are used. The latter, of which there are sometimes two, but more frequently only one to each canoe, are made with matting of the pandanus leaf, in the shape of a half oval, and the rigging is of the simplest description. On the whole, the canoes of the Society Islands are decidedly superior to those of the other groups: those of the Sandwich islanders are large and strong, but less elegant: those used in most of the other islands are of smaller size, and less skilfully constructed. The dexterity of the natives in managing these frail barks when out at sea is also, perhaps, unparalleled among the inhab. of savage countries. (Ellis, i. 138–170.)

The manufacture of cloth, which is more or less carried on in all the islands, is almost exclusively conducted by females, the materials commonly employed being the inner fibres of the bark from the branches of the bread-fruit tree. These fibres, after having been macerated, are beaten on a long board with a grooved mallet, the blows from which cause the moist fibres to interlace with each other, and to assume the appearance of woven cloth. By this process bales are sometimes made containing upwards of 200 yards of cloth, 4 yards wide. The colour of the unbleached cloth is a darkish brown; but it is always either bleached or coloured with vegetable dyes. Skill in the manufacture of this fabric was formerly highly prized by females of all ranks; but, since the introduction of European cloth, it has been made in much smaller quantities, and its use (in the Sandwich, Society, and Friendly Islands) is now confined chiefly to women, children, and the lower classes. The missionaries tried to introduce the weaving and spinning of cotton, but with little success; and this pursuit has been since abandoned. A kind of delicate matting is made in some of the islands from the bark of the hibiscus; the fabrics thus formed being either bound over the loins, or worn as mantles on the back. In the manufacture of this last article the islanders of the Palliser group far excel all others. A coarser kind of matting, also, is made of palm-leaves, for bedding and the sails of canoes.

As respects foreign trade, it may be said to have had no existence in these islands till a late period: the intercourse is chiefly kept up by means of the whaling ships, and the number of vessels touching at the Sanwich Islands may average about 80 annually. Trading intercourse has made the islanders aware of the value both of goods and money; and beads, looking-glasses, and buttons have wholly lost their former commercial value.

Most of the islanders of Polynesia are of a lively excitable disposition: hence, when not employed in the graver pursuits of fishing, canoe-building, or war, they give themselves up with great ardour to a variety of amusements, among which dancing is, perhaps, the most prominent, being common on all occasions, not merely of pleasure, but also of religion and state ceremony. Some of these dances are stated by the missionaries to have been very objectionable; while others were of a graceful and more dignified character. The exchange of a Christian profession for a debasing polytheistic idolatry has diminished the frequency of these exhibitions, though they still occasionally take place. The musical instruments of the islanders consist of a long narrow drum, a trumpet formed of a species of murex, into which is inserted a bamboo cane for a mouth-piece, and a flute of bamboo, about 16 inches long and about 1 inch in diameter. Boxing and wrestling, also, used to be favourite amusements; but these exercises, as well as many other national entertainments, have been all but abandoned since the introduction of Christianity, though there is, after all, but too much reason to suppose, that the efforts of missionaries have produced little radical change for the better in the morals of the mass of the pop.

The islanders of the Pacific, as respects physical character, may be divided into 2 distinct classes. The most ancient tribe is composed of Papuan negroes, who are distinguished by darkness of skin, smallness of stature, and black woolly or crisped hair: they chiefly inhabit the Admiralty Islands, New Britain, New Ireland, New Hebrides, New Caledonia, and the Solomon Islands. The other tribe, which is far more widely dispersed over the numerous groups of this great ocean, exhibits many of the features belonging to the Malays and aboriginal Americans, but is, in some respects, so different as to form a separate and intermediate race. The people of each cluster, also, are distinguished by minor peculiarities. The inhabs. of the Society Islands are of good stature and well made; of olive complexion, with open, prepossessing features, with a facial angle as perpendicular as in the European head; a bright, full, and jet-black eye, placed under well-arched eyebrows, a straight or aquiline nose, well-formed mouth, and moderately high forehead, with straight though not wiry hair, either black or brown. The Sandwich islanders have more firm and muscular limbs, but in other respects bear a close resemblance to those just described; and they are generally active in their movements, graceful and stately in their gait, and perfectly unembarrassed in their address. Both sexes incline to corpulency in advanced life. It is remarkable, also, that the chiefs and persons of hereditary rank, throughout the islands, are, almost without exception, superior to the common people, in stateliness, dignified deportment, and physical strength: indeed, so great is the difference, that Bougainville and others have supposed them to be a distinct race, whose ancestors at some remote period had brought the aborigines into permanent subjection. (Ellis's Pol. Researches, i. 78–84; and Moerenhout, ii. 247–253.)

With respect to the languages of Polynesia,

Digitized by Google

Marsden first ascertained that there is one general language pervading the whole of the South Sea Islands, and extending, with its different dialects, from the E. Indian archipelago to the E. extremity of the Polynesian groups. 'Indeed,' says M. Moerenhout, 'it is impossible to avoid observing the close analogy between the dialects spoken in the many different islands.' So striking a similarity is there between the languages of the Society Islands and New Zealand, that the natives mutually understand each other: the inhabs. of the Sandwich, Marquesas, and Society Islands converse after only a few days' practice, and the occupants even of the far distant Easter Island are intelligible to the whole of the other islanders both N. and S. of the equator. It has been believed by some linguists that all these dialects are branches, more or less, of the Malay language; and many words certainly bear some analogy to those in the Malay vocabulary; but, in fact, 'there is no living language either of Asia or America, which can be denominated the parent-stock of the great Polynesian language.' (Crawfurd's Indian Archipelago, ii. 80–86; Moerenhout, i. 395–398.)

1. The *Caroline Islands* (sometimes called the New Philippines) extend over about 20 deg. of longitude, and are divided by Captain Lutkè into 46 groups, comprising several hundred islands, a few of which are high and rising in peaks, but by far the greater number are low, and merely of coralline formation. They were discovered in 1686 by a Spaniard, who named them after Charles II., king of Spain. The productions of these islands are very similar to those of the Sandwich and Society Islands; but the bread-fruit is found only in a few of the groups, and the hog is wholly absent: hence these islanders live chiefly on fish. The inhabs. are reputed to be the most expert sailors and fishermen of Polynesia; and, notwithstanding the tempestuous sea by which they are surrounded, they have a considerable trading intercourse in canoes with the Ladrone Islands and the E. Archipelago.

2. The *Sandwich Islands* (10 in number, of which 8 are inhabited) form a group many hundred miles distant from all the rest. The area of the largest island, Owhyhee or, more properly, Hawaii, is estimated at 4,300 sq. m., being more than half that of the entire group, and is, indeed, by far the largest island of Polynesia. It rises in high and towering cones to an elevation of nearly 16,000 ft. from the sea; and not only is the gigantic volcano of Kirauea, with its immense crater, 2 m. in length by nearly 1 m. in width, and several hundred feet deep, in a constant state of terrific ebullition, but the whole island is one complete mass of lava; and, being perforated with innumerable apertures in the shape of craters, may be considered as forming a hollow cone over a vast furnace in the heart of a stupendous submarine mountain. (Ellis, iv. 236, 269.) The pop. of the Sandwich Islands is estimated at about 112,000. The males are of a darker complexion than those in the Society Islands; the females have coarse and disagreeable features, and both sexes are gloomy and reserved. The natives generally are remarkable for their attention to the arts of industry, and have distinguished themselves above all others by their efforts to introduce European civilisation.

Christianity was introduced by the American missionaries in 1820, and is now the religion of the state; schools have been established, churches have been built, and the forms of religion are, at least, pretty generally observed. European usages have also become fashionable, and the costume of the better classes, women as well as men, closely resembles that of the Anglo-Americans. Honolulu, in the island of Oahu, lat. 21° 18′ 2″ N., long. 157° 55′ W., is the cap. of the group, and has a considerable pop., of whom about 1,000 are foreigners. Many houses are built of stone; but the natives still prefer living in their huts, so that the town is grotesquely irregular. The harbour (formed by a barrier-reef of coral, having a single opening) has accommodation for between 70 and 80 vessels of from 500 to 600 tons. This group of islands has attracted much notice of late years. For a considerable period they have been visited by the whaling ships in the Pacific; and the settlement of Oregon and California, and the intercourse which has already sprung up, and which, no doubt, will continue to increase between them and China, has given the islands great additional importance, from their peculiar aptitude to serve as a station for the steamers and other ships that may be engaged in that trade. In consequence, there has latterly been a rapid increase in the town of Honolulu, and the ground round the harbour is now wholly occupied. English churches, with English newspapers, schools, hotels, boarding-houses, and shops, have been established. It is a curious fact that the native pop. has been rapidly decreasing for many years, and does not now, probably, exceed a third part of its amount at the epoch of their discovery. It has recently been proposed, in consequence of the extraordinary demand for agricultural produce by the foreign vessels frequenting their ports, to bring settlers from China to supply this deficiency.

Captain Cook, who, after Columbus, ranks as the greatest of modern discoverers, was killed in a collision with the natives of Owhyhee on the 14th February, 1779.

3. The *Society Islands* consist of six larger and several smaller islands. The principal of these, called Otaheite (or, more properly, *Tahiti*), is 108 m. in circ., and has a pop. of about 7,000. It is extremely mountainous, some parts attaining an elevation of nearly 7,000 ft.; but 'extensive as well as fertile vales open on every side towards the sea, and the entire land is clothed, from the water's edge to its topmost heights, with a perennial verdure, which for luxuriance and picturesque effect is certainly unparalleled.' (Bennett, i. 62.) Next in importance to Otaheite, and about 130 m. NW. that island, is Ulietea, or Raiatéa, nearly 60 m. in circ., encircled by a reef of coral, bordered by numerous islands: it has a bold, mountainous appearance, and is scarcely less picturesque than that last mentioned. Eiméo is another mountainous island, with an abrupt rocky coast, and is chiefly distinguished as the central station of the missionaries on this group: a school and printing office are established here. The forms of Christian worship are observed here as well as in the Sandwich Islands; but civilisation is considerably less advanced, and European costume considerably less prevalent. (Bennett, i. 70.) The seat of government and principal port of Otaheite is Pápéta, which exhibits the same combination of European houses and native huts as the cap. of the Sandwich Islands. The harbour is a capacious sheet of smooth water, of a circular shape, and so completely land-locked as rather to resemble a large dock-basin than a natural harbour. The commerce, consisting in the exportation of pearl-shells, sugar, cocoa-nut oil, and arrowroot in exchange for European manufactures, chiefly cloth and hardware, is carried on exclusively by foreigners. This port is also frequently visited by whalers coming here to refit or to obtain supplies; but Otaheite is not, and never can be, so important a commercial station as Oahu, in the Sandwich Islands.

4. The *Marquesas*, which were discovered by

Digitized by Google

the Spanish in 1595, consist of thirteen islands, extending about 200 m. from NW. to SE. The largest, Nunhiva, is about 70 m. in circ., and is the only one generally frequented by shipping. The coast scenery is neither picturesque nor inviting, its principal features being black naked cliffs and barren hills; but in the interior are many fertile vales and very picturesque scenery. The inhabs., with regard to personal beauty, are superior to most others of the Polynesian tribes; and the women, though short in stature, are well-proportioned, and sometimes even handsome. In civilisation, however, they are far behind the Sandwich islanders, and are generally characterised by covetousness, irascibility, love of revenge, and gross sensuality. Cannibalism was practised by them within a very recent period; and they have steadily resisted all attempts to convert them to Christianity. Polygamy, however, though not forbidden by law, has fallen into disuse.

5. The *Friendly Islands* are low, encircled by dangerous coral reefs. The soil is almost throughout exceedingly rich, producing, with very little care, the banana, bread-fruit, and yam. The pop. may amount to about 90,000; but the natives, though favourably mentioned by Captain Cook, appear to be as treacherous, savage, and superstitious as any in the worst parts of Polynesia.

6. *Pitcairn Island*, which stands alone, near the E. extremity of Polynesia, is chiefly interesting on account of its having been the refuge of the mutinous crew of Captain Bligh's ship, the Bounty. The mutineers, after having turned their captain and a few of the crew out into an open boat, tried to make a settlement in the Society Islands, but afterwards fixed themselves in this isolated spot, where a few of them, with their descendants, were found by Captain Beechey, in 1825. It is not more than 7 m. in circ., with an abrupt rocky coast, and rises about 1,050 ft. above the sea. The present pop. comprises about 80 persons, who (being the descendants of Europeans and native women) form an interesting link in person, intellect, and habits between the European and Polynesian races. They are tall and robust, though not handsome, with black, glossy hair, and frank, honest, good-humoured dispositions. They are further said to be industrious, and strictly observant both of morality and religion.

7. The *New Hebrides* (discovered in 1506, and so named by Captain Cook, who surveyed the entire group) are considerably hilly, though well clothed with fine timber; and the valleys are extremely abundant, producing figs, nutmegs, and oranges, besides the fruits common to the rest of Polynesia. The inhabs. present about the most ugly specimen extant of the Papuan race; the men live almost in a state of nudity; and the women, who are used as mere beasts of burden, wear only a petticoat made from the plantain leaf. Their canoes are more rudely fashioned than in most of the other islands; and, on the whole, these people seem to be among the most degraded of the islanders of the Pacific.

8. *New Caledonia*, which is the largest island of the W. groups, is far less fertile, and produces a smaller variety of fruits and vegetables than any of the islands yet mentioned. The natives closely resemble in habits, and the total absence of civilisation, those of the New Hebrides; though, owing to the ravages caused by famine, they are infinitely more wretched. The Pelew Islands, in about lat. 7½° N., long. 135° E., are chiefly known from the accounts of Captain Wilson, who was wrecked on them in 1783. He describes the inhabitants as hospitable, friendly, and humane. Breeds of cattle, goats, and poultry were subsequently sent to the islands, and have succeeded extremely well.

The European knowledge of the many extensive groups of islands comprised in Polynesia is still very far from being satisfactory. Magellan began the work of discovery early in the 16th century, and he was followed at the close of the same century by Mendane and other Spanish navigators. The Dutch made further discoveries in the 17th century; but to England mainly belongs the honour of having explored and laid down the exact position of the principal groups of the South Sea Islands, and the names of Byron, Wallis, Cook, Vancouver, and Beechey must ever rank high in the estimation of geographers. Great credit is also due to La Pérouse, D'Entrecasteaux, Freycinet, and other learned navigators, sent out on exploring voyages by the French government. In consequence of the labours of these and other navigators, aided also by the information gained from missionaries resident in the islands, a pretty intimate acquaintance with the condition of the natives in the principal groups of Polynesia has been gained; but there remains a great number of islands, especially on the W. side of the Pacific, that have very seldom been visited by Europeans, and are occupied by people as savage and uncivilised as the Sandwich islanders of the last century.

POMERANIA, a large prov. of the Prussian states, lying along the S. coast of the Baltic, from long. 12° 20′ to 18° 2′ E., having E. and S. West Prussia and Brandenburg, and W. Mecklenburg. Its form is oblong; its length from E. to W. is above 200 m., while its breadth varies from 30 to 60 and 80 m. Area, 12,179 sq. m. Pop. 1,389,068 in 1861. The province is divided into 3 regencies, and these again into 25 circles. Surface, flat. Principal towns, Stettin, Stralsund, Greifswald, Stargard, and Stolpe. Principal rivers, Oder, Leba, Stolpe, Rega, Persante, Ucker, Peene, and Ihna. The Haff is a large bay, or rather lagoon, of an irregular form, which communicates with the Baltic by the mouths of the Oder. Along the sea the land is in many parts so low that it would be overflowed were it not protected by ranges of sand hills, and where these are wanting, by dykes, as in Holland. Soil mostly sandy and unproductive, except along the rivers and lakes, where it is marshy and comparatively fertile. A large part of the country is covered with forests and heaths, and there are also many shallow lakes. Agriculture was, until lately, in a rather backward state; but, since the year 1848, has made considerable progress. Wheat and barley are grown; but rye, buckwheat, and oats are the principal corn crops. Potatoes are largely cultivated, and form, indeed, a principal part of the food of the people: flax and hemp are also grown, with tobacco. The breeding of cattle, sheep, and hogs is a favourite occupation. Geese are reared in immense numbers; and, besides those consumed in the province, large quantities are exported smoked and dried. Very few farms are occupied by tenants holding under a lease, but are chiefly farmed by or on account of the proprietors. Many of the peasantry live in mean cottages of wood or clay: their clothes are all of home manufacture. Minerals unimportant. The woollen manufacture in a domestic state is pretty generally diffused, and linen and leather are also produced. There are numerous breweries and distilleries, and dram-drinking was formerly prevalent, but is now greatly on the decline. The fishery, particularly of sturgeon and salmon, is carried on along the coast, and in the creeks and rivers.

POMONA, one of the Orkney Islands, which see.

Digitized by Google

POMPEII (called by the Greeks *Pompeia*), a long-buried city of ancient Italy, in Campania, not much celebrated in ancient history, but now an object of the greatest interest in consequence of its rather recent discovery and exhumation. It was originally close to the sea; but it is now nearly 1½ m. inland, and is about 5 m. S. by W. the crater of Vesuvius, and about 15 m. SE. Naples. The æra of its foundation, as well as the greater part of its early history, is involved in obscurity; but the presumption is, that it was settled by Osci and Pelasgi prior to the establishment on this coast of the Greek colonies from Eubœa. About anno 440 B. C. it fell into the hands of the Samnites, from whom it was taken, with their other possessions, by the Romans about 80 years afterwards. Pompeii revolted, with the other Campanian towns, during the Social War; and little more is known of it till it was visited by an earthquake (A. D. 63), which occasioned great devastation. '*Motu terræ celebre Campaniæ oppidum Pompeii magna ex parte proruit.*' (Tacit. Annal., lib. xv. cap. 22.) The repairs consequent to this disaster were incomplete, as is seen by the state of the excavated ruins, when the city, with Herculaneum, Stabiæ, and other towns in its vicinity, was wholly overwhelmed by an eruption of Vesuvius A. D. 79. This tremendous calamity has been admirably described by the Younger Pliny, whose uncle was one of the sufferers, in a letter to the historian Tacitus: —'*Præcesserat per multos dies tremor terræ, minus formidolosus, quia Campaniæ solitus; illi vero nocte ita invaluit ut non moveri omnia sed everti crederentur. . . . Mare in se resorberi et tremore terræ quasi repelli videbamus. Certe processerat littus, multaque animalia maris in siccis arenis detinebat. Ab altero latere nubes atra et horrenda ignei spiritus tortis vibratisque discursibus rupta in longas flammarum figuras dehiscebat; fulgoribus illæ et similes et majores erant. . . . Mox audires ululatus fœminarum, infantium quiritatus, clamores virorum: alii parentes, alii liberos, alii conjuges vocibus requirebant, vocibus noscitabant: hi suum casum, illi suorum miserabantur: erant qui metu mortis mortem precarentur. Multi ad deos manus tollere. . . . Nec defuerunt qui fictis mentitisque terroribus vera pericula augerent. . . . Mox dies verus, sol etiam effulsit, luridus tamen. . . . Occursabant trepidantibus adhuc oculis mutata omnia, altoque cinere tanquam nive obducta.*' (Plin. Epist., vi. 20.) It seems probable, however, from the small number of skeletons discovered, here and at Herculaneum, that the inhabitants of both cities not only found time to escape during the confusion, but also to carry with them their most valuable effects.

From this time forward, for about 1669 years, Pompeii continued buried under the ashes, pumice-stone, and other volcanic matter by which she had been overwhelmed, and even her situation was matter of doubt and conjecture. It is surprising, however, that her ruins did not sooner attract attention; for, in 1592, the celebrated architect and engineer, Dominico Fontana, having been employed to construct an aqueduct to convey water to Torre, fell in with the remains of the buried city. But this discovery appears to have attracted little or no attention; and it was not till 1748, that peasants employed in cutting a ditch fell in with the ruins of the city, that they became an object of interest and attention. The excavations were commenced in 1755, and have since been pretty constantly, though not very vigorously, prosecuted. Not having been overwhelmed by lava, but with tufa, ashes, and scoriæ, the excavations are much more easily effected here than at Herculaneum. (Description de Pompeii, par Bonucci, p. 31, &c.)

Pompeii, to borrow the words of an intelligent observer, is 'the most wonderful of the antiquities of Italy; and it is perhaps the only one which never disappoints a traveller who is even moderately acquainted with the history of ancient Rome. The impression which it gives of the actual presence of a Roman town, in all the circumstantial reality of its existence 2,000 years ago, is so vivid and intense, that it requires but a small effort of imagination to place yourself among the multitudes which once thronged its streets and theatres, and occupied its now voiceless chambers. The expression so often used, that you expect to see the inhabitants walk out of their houses to salute you, is scarcely a figure of speech. Many things, in fact, concur to foster the illusion. You see a street before you carefully paved and well worn, and bordered with *trottoirs*, in good preservation, as if it had been in use on the preceding day. The houses generally extend in unbroken lines, and even the dilapidation is in some measure concealed by the small modern roofs placed over the walls to protect them from farther waste by the weather. The doors and windows, indeed, are all open; but so they generally are in the modern houses of Italy; and the sombre brown tint of the walls is not very different from what is seen in the decayed towns of the same country at the present day. You turn to the right and the left, and wander from street to street, and still you have the perfect image of a town before you, except that no inhabitants appear, and these you may suppose have only left it a few days before. We have detached public buildings of many kinds elsewhere; but here we have a Roman forum, with all its accompaniments of temples, porticoes, and curiæ, not indeed perfect, but only so injured that what is missing can be replaced, and what is mutilated restored. We have also many shops, with their utensils of trade in them, and about a hundred private houses of all descriptions, from the poor cottage to the patrician mansion, enabling us, for the first time, to obtain a distinct idea of the form and arrangement of a Roman house, and giving us, as it were, a glimpse of the domestic life and manners of the people. The public baths here, which were almost entire, have thrown new light on the structure of those buildings. Lastly, the *tout-ensemble* of the walls, gates, streets, forum, houses, temples, fountains, theatres, associated as they are with each other, give us a conception of a Roman town incomparably more clear and satisfactory than any number of such objects scattered over distant localities could have furnished.' (Maclaren's Notes, p. 100, 103.)

It seems evident on an examination of the superincumbent strata, which consists of various layers, that intervals had taken place in the original eruption, which lasted for three days; and it is farther probable that some of the uppermost layers may have been the result of subsequent eruptions.

This resuscitated city, of which about one-fourth part is now laid open to public view, is of a somewhat oval form, ½ m. in breadth and ¾ m. in length, covering an area of 160 acres, or about two-thirds of the new town of Edinburgh; and considering the narrowness of the streets, the nature of the houses, and the mode in which the slave population generally were lodged, the entire population could scarcely have exceeded 25,000 inhabitants. The walls, which have been traced on every side, except towards the sea, are about 20 ft. thick, and nearly equally high, being

Digitized by Google

faced with blocks of lava inside and outside. There are six gates, and many towers, rising high above the ramparts, and pierced with arches. The best approach to Pompeii is by the Appian way to 'the Gate of Herculaneum,' which is nearest the sea, and at the NW. angle of the city. Along each side of the road, approaching this gate, extends a line of tombs, many of which remain perfectly entire, their angles being as sharp, their inscriptions as legible, and their whole appearance almost as fresh as if they had been erected only a few years ago. The monuments vary greatly in size, pattern, and material: many are mere cenotaphs, while others have niches for urns; and a pretty common form is that of a small oblong temple, adorned with columns or pilasters. On the whole, these tombs are not unlike the more ambitious monuments in our own churchyards; but there is nothing resembling our single upright slabs, or flat gravestones. The gate of Herculaneum consisted, like the others, of a large central and two smaller side-gates, not unlike those of Temple Bar in London, the central archway being about 20 ft. in height and 15 ft. in width. The streets appear to have been arranged pretty regularly in parallelograms; but they are very narrow, the most usual breadth being 18 or 20 ft., of which one-third is occupied by the trottoirs, which invariably line both sides of the horseway. An exception, however, must be made in favour of the 'Street of the Silversmiths,' which is 40 ft. in width, and decidedly the finest in Pompeii. The middle of the road is paved, like the Via Appia, with masses of lava of irregular shapes, and from one to two ft. in diameter, the most level surfaces being placed uppermost; and in many parts the ruts produced by the wheels are still obvious. The trottoirs, which are raised about ten inches above the rest of the street, average about four ft. in width: they are generally made of a sort of compound of lime, earth, and gravel, not unlike the asphalte used for modern pavements in London and Paris.

The largest excavated space in Pompeii, and that which exhibits most architectural magnificence, is the forum, an extensive oblong area, once paved with large slabs of marble. The feelings of a classic traveller, on beholding, for the first time, such a monument of antiquity, are well described by Mr. Maclaren. 'I felt that it was not a trifling incident in my life, to stand in a veritable Roman forum. There it lay distinctly before me, rifled of the greater part of its marble pavement, of its statues, and some of its columns, yet retaining enough of its ancient lineaments, to give a perfect idea of its form, extent, and distribution of its parts. It had been terribly injured by the earthquake, A.D. 63, and was rebuilding, when the great catastrophe occurred. The forum was the great place of public resort: the idle came here to inquire after news, the busy to talk of business, friends to keep appointments, patrons to meet their clients, suitors to attend the courts, candidates for office to solicit votes: here the orators harangued, and the people shouted, the magistrates met in council, and the tax-gatherers collected the revenues: here the decrees of the senate were promulgated *viva voce*, and plays, festivals, and gladiatorial shows were advertised by short notices badly spelt, painted on the walls in rudely formed letters.' (P. 131.) The entrance from the NW. corner (that nearest the gate of Herculaneum) is by a flight of steps leading downwards through a brick arch into an oblong area about 490 ft. in length by 114 ft. in width, and, according to a recent traveller, surrounded by columns, and the ruins of temples, triumphal arches, and other public edifices, the uses of which can in general only be conjectured. The red masses of brick divested of their marble casings, the brown and yellow tints of the tufa, the fragments of white stucco attached to the shattered walls of the different edifices, and the pedestals which once supported statues in honour of illustrious patriots, are all that now remain to attest its former beauty and magnificence.' A Doric colonnade ran round three of its sides, and the fourth was occupied by a temple of Jupiter. The columns formed a species of covered gallery, raised above the central area, and a second row of smaller columns, placed on the top of the first, formed a second gallery, which would afford a view of every thing passing in the area. The temple of Jupiter has a prostyle portico, supported by 12 very beautiful Corinthian columns, and its total length, from the front steps to the back wall of the *cella*, is 120 ft., the uniform breadth being 45 ft. On the W. side of the enclosure stood the prisons and public granaries, a peripteral temple of Venus, having a façade looking southward, of nine Corinthian columns, and a basilica, or court of justice, which is the largest building in Pompeii. It is oblong shaped, 220 ft. in length by 80 ft. in breadth, and is entered through a vestibule having five door-ways of masonry. The roof of the interior was supported by a peristyle of 28 Ionic fluted columns, and at the further end are some remains of what was once the prætor's tribunal. At the S. end of the forum, which was also ornamented by a triumphal arch, are the remains of three buildings of nearly equal size and similar shape, that may have been curiæ, or places of assembly for the magistrates: these, however, are of very confined dimensions, and possess little interest. On the E. side, opposite to the basilica, and flanked on one side by the Street of the Silversmiths, is a large enclosed building, in the shape of a parallelogram, within which was an oblong peristyle of white marble Corinthian columns; it is commonly called the Chalcidicum, and was built by Eumachia (whose statue is still standing), but its former use seems to be quite conjectural, though Gell and Donaldson seem to think, from some of the pictures and other remains found there, that it may have been a kind of cloth-hall. Adjoining it, and fronting the forum, is a small temple of Mercury, in the court of which is an altar of white marble, beautifully sculptured in bas-relief, representing a sacrifice. What the next building may have been is very doubtful; but as it has an altar, without a cella, we incline to think that it may have been a senaculum or hall of meeting for the town-council. Lastly, the space close to the NE. angle of the forum is occupied by a very large enclosed peripteral structure, supposed to have been a pantheon dedicated to the twelve Dii Consentes of Roman mythology, and comprising, besides an ædicula or raised chapel, numerous cells for the accommodation of the priests. Under the colonnades of the forum, close in front of the Pantheon, the entrance to which is by a rather narrow vestibule, are the remains of seven recesses or shops, in some of which the pedestals of the tables are still visible: these may possibly have been the *tabernæ argentariæ*, common in most Greek and Roman fora.

Next in importance to the excavation of the forum is that of the quarter occupied by the theatres. Its best approach from the forum is by the 'Street of the Silversmiths:' the space cleared comprises two theatres of unequal size, a square usually called the soldiers' quarter, and two temples, with other buildings of minor im-

Digitized by Google

portance. The theatres will not bear to be compared, in point either of size or splendour, with the magnificent structures at Rome; but still they have the remains of considerable beauty, and the largest, at least, would be considered of large size in any modern city. It has six entrances, leading to different parts of the building, and six inner doors, or *vomitoria*, opened on an equal number of staircases running down from the external circular corridor to all parts of the house. The benches were about 1 ft. 3 in. in height, and 2 ft. 4 in. in width, and it would appear that they may have been capable of accommodating about 5,000 males, chiefly of the middle classes; those of high rank sat on chairs in the orchestra, and the women occupied a gallery running round the top of the building over the corridor. All the benches as well as the orchestra seem to have been entirely covered with marble, of which, however, there are now but few vestiges. Like the Coliseum, and other ancient theatres, it was open at top; but on the outside wall may still be seen the iron rings inserted to receive the masts supporting the awning. Of the scene itself, enough remains to show that the three chief doors were situated in deep recesses, and that behind them was the postscenium. The smaller theatre, which communicates with that last mentioned, is built on the same plan, and similarly arranged, having had accommodation for about 1,500 spectators; but, unlike the other, it seems to have been permanently roofed. Its shape, also, is rather elliptical than semicircular. Close to the theatre is a large open space, supposed to have been soldiers' barracks; and near it is a Doric temple of Hercules, the oldest in the city, and said to have been erected at least 800 years B.C. The great amphitheatre occupies a large space at the E. angle of the town, quite separate, and at some distance from the rest of the excavations. Like other amphitheatres it is oval-shaped, the extreme outside length being 430 ft., and do. breadth 335 ft. The seats rise above each other in 24 successive rows, and must have accommodated upwards of 10,000 persons.

The baths, which occupy a space not far from the forum, of about 100 ft. sq., are interesting not so much from their size as from the simplicity of their construction, which makes their arrangements more intelligible than in the complicated buildings of this kind in Rome and elsewhere. As, however, it would be impossible without a diagram to give a satisfactory account even of those at Pompeii, we pass at once to the domestic architecture of the city, which, indeed, is one of its most interesting features. Mr. Maclaren closely examined about a dozen of the private houses, which, he says, are so different from those either of Britain or modern Italy, that it is not easy to comprehend the use of their several parts. Indeed, most of them are so dilapidated that they could not be understood at all without the aid of Pliny and Vitruvius. 'The present condition of the houses and shops resembles what we see in our tenements after the occurrence of a fire. The roof, upper floors, doors, and all the woodwork, have disappeared, the furniture has been carried off, and nothing remains but the half-dilapidated walls, the pavement of mosaic on the ground flats, columns entire or in fragments, stone counters, and a few bulky or heavy articles of too small value to be worth removing. The apartments, however, have been carefully cleaned out; and not only the houses, but the streets, were completely free of foreign matter, except a thin covering of ashes and scoriæ, deposited by the recent eruption of Vesuvius, and which was easily removed by a besom or wisp of straw.' The paintings, also, are still on the walls, and remarkably fresh. The house of Pansa, though not the largest, is better calculated than any other to convey to the reader an idea of a private town residence; and, taking this as a guide, we may remark that the houses generally consisted of a square or oblong enclosure surrounded by blind walls, the central court being open, and chambers formed round it, over which sheds (*compluria*) projected inwards, which discharged the rain water into a stone or mable basin (the *impluvium*), in the centre of the court. The larger houses, however, have a second court, with its corresponding impluvium, surrounded by columns; and hence, while the outer court is called simply *atrium*, the inner one (divided from it by a square apartment, called the *tablinum*, from being usually adorned with pictures and statues) is denominated the peristyle, and was devoted to the use of the family. Bed-rooms and parlours run round both courts, a garden extends some way at the back of most of the houses, and the front entrance, in Pompeii at least, is by a passage 8 or 10 ft. wide. Paper, horn, mica, and even pretty thick glass, were very generally used; and in cold or hot weather awnings were commonly thrown over the impluvium; but no fire-places are seen in the houses, and, like those in modern Italy, they seem to have been wholly built for summer use. The exterior of the houses is generally of brick covered with plaster, and formed into panels: in the interior, also, the walls are coated with fine plaster, which serves as a ground for frescoes, which are found pretty abundantly in all parts of the larger houses throughout the town: and these paintings, if they do not equal other extant specimens of Roman art, are highly valuable for the light which they throw on the costumes, habits, and amusements of the ancient inhabs. The shops, like those of Naples, seem to have been extremely small, scarcely exceeding 14 ft. square, and wholly open in front, with the exception of a low counter, being closed by shutters at night, somewhat in the same manner as the butchers' stalls and shops in England. Some of the implements of trade still remain, such as earthen-jars, ovens, mills, and cooking pans; and there is reason to believe that the ancient inhabs. pretty well understood the division of trades. Most of the shops and other places of public entertainment, not excepting those belonging to the *Donne Libere*, had images or figures over the doors, serving, like the signs in modern towns, to indicate the profession or business of the occupants. The household furniture and domestic utensils found in the excavations both here and at Herculaneum have, with a few slight exceptions, been removed to the Museo Borbonico at Naples; and the number of articles of every kind and material is truly immense. 'Among these,' says Mr. Maclaren, 'are several iron chairs, like our garden chairs; braziers for burning charcoal or wood, keys and locks, metallic mirrors, pots and pans, glass bottles and drinking vessels, lamps of copper and earthenware, vases and urns, marble statues and bas-reliefs, ancient armour, seals, styles and inkstands, bells, moulds for bread and pastry, glazed plates for the table, scales and steelyards, spoons, ear-rings, and similar articles.

The discovery of Pompeii has thrown a strong and steady light on many points connected with the private life and economy of the ancients that were previously involved in the greatest obscurity.

PONDICHERRY (Fr. *Pondichéry*), a town of Hindostan, and the principal French settlement on

Digitized by Google

the Asiatic continent, on the Coromandel coast, 83 m. SSW. Madras; lat. 11° 57′ N., long. 95° 54′ E. Pop. 54,350 in 1861, of whom about 900 were Europeans. Standing on a flat sandy plain, near the shore, it has a very imposing appearance from the sea, and it is in reality a handsome regularly laid out town. The streets in the European quarter are of uniform breadth, built with remarkable regularity, and intersecting each other at right angles. The houses, which are of a good height, have flat terraced roofs, the walls being stuccoed white and yellow, and not intermixed with native huts. Nearly in the centre is a spacious square, laid out in walks, shaded by rows of trees, with the government house on the N. side, and open on the E. to the sea. The black, or native town, to the W. of the former, and separated from it by a canal, crossed by several bridges, is laid out with nearly the same regularity as the European town, though the houses are very inferior. Pondicherry was formerly strongly fortified, but the only portion of its works that now remains is an old brick tower, on which the flag is hoisted. The chief buildings are the government house, an edifice of a single story, adorned with columns, and surmounted by a balustrade; the church, built by the Jesuits, and a good market-place. It has a college for Europeans, a school for the Indians, a botanic garden, and a government pawn-bank.

The French possessions in India, comprising Pondicherry, Chandernagore, Karical in the Carnatic, Mahé in Malabar, and Yanaon in Orissa, with the territory attached to each, have a total pop. of about 166,000, of whom 1,000 are whites. The territory attached to Pondicherry is considerably larger than the rest, and has 10,613 hectares under culture, producing 6,488,640 kilogr. rice, 6,734,000 kilogr. other grains, 6,900,000 cocoa nuts; with some betel, and a little indigo, tobacco, and cotton. The trade, by far the greater part of which centres in Pondicherry, is chiefly with the rest of the Coromandel coast, Sumatra, the Isle de Bourbon, the Mauritius, and Senegal. The governor of the French settlements in India resides at Pondicherry, where also is the chief court for these colonies, and a tribunal of primary jurisdiction.

This town was purchased by the French from the Bejapoor sovereign in 1672. It was successively taken by the British in 1761, 1778, 1793, and 1803, but was finally restored at the treaty of Paris, in 1815.

PONT-A-MOUSSON, a town of France, dép. Meurthe, cap. canton, on the Moselle, by which it is intersected; 16 m. N. Nancy. Pop. 8,115 in 1861. The town derives its name from a bridge of eight arches which here crosses the river, and led formerly to the old castle of Mousson, now in ruins, on an eminence E. of the town. It is surrounded by planted boulevards, and has several good edifices, including a Gothic church, built towards the end of the 13th century, a town-hall, St. Mary's Abbey, now converted into a seminary, large cavalry barracks, a good hospital, and a building termed the *Maison des Sept Péchés Capitaux*, from its front being ornamented with old sculptures intended to represent the cardinal sins. The town has manufactures of coarse woollen stuffs, printing-types, earthenware tobacco-pipes, and beet-root sugar.

PONTECORVO, a town of S. Italy, prov. Caserta, on the Garigliano, 20 m. SE. Frosinone, and 37 m. NW. Capua, on the railway from Rome to Naples. Pop. 8,871 in 1862. The town has several churches and convents, and an old castle. Napoleon I. conferred on Marshal Bernadotte the title of prince of Pontecorvo, which he enjoyed till he became king of Sweden. Near it are some considerable ruins, supposed to indicate the site of the ancient *Interamna ad Lirim*.

PONTE-DELGADA, a sea-port, and the largest and most populous city (though not the cap.) of the Azores, on the S. side of the island of St. Michael; lat. 37° 45′ 10″ N., long. 25° 41′ 15″ W. Pop. estimated at 22,000. Its appearance from the sea is far from picturesque, exhibiting a compact uniform mass of bright-looking buildings, backed by a few conical hills, some of which, however, are covered with a luxuriant vegetation. It has numerous churches, monasteries, and convents; but the latter, which were celebrated alike for their artificial flowers made of birds' feathers, their sweetmeats, and the easy virtue of the vestals by which they were occupied, have been suppressed in recent years. The houses are substantial, but the streets are very ill-paved and filthy. Its markets are abundantly supplied with fish, poultry, eggs, and vegetables of all sorts, including Spanish beans, yams, sweet and common potatoes, oranges, and lemons, and every thing is remarkably cheap. When contrasted with the other towns in the Azores, it displays considerable wealth, activity, and industry. The exports consist of oranges, wines, brandy, and rocella. A mole has been constructed for the accommodation of the smaller class of vessels, but those of considerable burden have to anchor in an open roadstead. The town and harbour are defended on the W. by the castle and fort of St. Braz, mounting ninety pieces of cannon, and on the E. by the forts San Pedro and Rosto de Cao. The governor of the islands St. Michael and St. Mary resides at Ponte Delgada.

PONTEFRACT (vulgo *Pomfret*), a parl. and mun. bor., market town, and par. of England, W. riding co. York, upper div. wap. Osgoldcross, on a commanding eminence about 2 m. SW. the Aire, 10 m. E. Wakefield, 21 m. SW. York, and 174 m. N. London by Great Northern railway. Pop. of munic. bor. 5,346, and of parl. bor. 11,736 in 1861. The town is well-paved and well-built, with open, spacious, and clean streets, lined by handsome houses, chiefly of brick, the principal thoroughfare running NE. past the ruins of the old castle, at the N. end of the town. The principal public buildings are a modern town-hall, with an attached gaol, a new market-hall, 80 ft. by 70, opened by the late Lord Palmerston in 1860, and a court-house for the quarter sessions of the W. riding. The par. church, originally built in the reign of Henry I., was subsequently so altered, that little remains of the olden edifice. A more ancient, and once parochial church, has a tower at the intersection of the nave and transepts, which is worthy of examination. The living is a vicarage in the gift of the chancellor of the duchy of Lancaster. There are also places of worship for Rom. Catholics, Wesleyan and Primitive Methodists, Independents, and the Society of Friends.

A grammar school, founded in the reign of Edward VI., was revived and rechartered in 1792: it is 1 of 12 schools privileged to send candidates for Lady E. Hastings' exhibitions at Queen's College, Oxford. Another charity school for children of both sexes, endowed with 95*l.* a year, has been incorporated with a national school; and a neat building, formerly the theatre, has been converted into school-rooms capable of accommodating 400 children. The town has four Sunday schools and six hospitals, or almshouses, of various foundations, furnishing lodging, clothing, and a small stipend to 53 aged people of both

Digitized by Google

sexes. A subscription library, mechanics' library, and news-room have recently been formed. The races, formerly held here in September, are now extinct.

The neighbouring village of Ferrybridge within the bor. is on the Aire (crossed there by a stone bridge of three arches), and till recently enjoyed considerable advantages from its position on the Great North road: it is now in a state of decay. The vicinity of Pontefract is famed for its gardens and nurseries, which furnish vegetables in great abundance for the markets of York, Leeds, Wakefield, and Doncaster. The deep loamy soil around it is also well adapted for the cultivation of liquorice (*Glycyrhiza glabra*), which is grown here in large quantities, and supplied extensively to London and other large towns. Filtering stones are quarried on the castle-hill, and are in great request in all parts of the kingdom. Pontefract received its charter of incorporation in 2 Richard III. Under the Municipal Reform Act, it is governed by a mayor and 3 aldermen, with 12 councillors, having also a commission of the peace under a recorder. The bor. has sent 2 mems. to the H. of C., with some interruptions, since 23 Edw. I., the right of voting down to the Reform Act having been in the inhab. householders within the bor. Reg. electors, 711 in 1865. The spring quarter sessions for the W. riding are held here in Easter week. Markets on Saturday, and large fortnight fairs for cattle, besides eight other annual fairs.

The principal celebrity of Pontefract is owing to its castle, once of great extent, but now a mere ruin, its site having in a great measure been converted into garden ground. It appears to have consisted of several towers, with intervening walls and other buildings, the round-tower, or donjon keep, having occupied an eminence at its W. extremity. It was finished in 1080. In the beginning of the 14th century it became, by marriage, the property of the earls of Lancaster, and in the reign of Henry IV. was attached with the rest of the duchy to the crown. For the space of many centuries it stood the ornament and terror of the surrounding country, till the civil wars of Charles I., when, after sustaining three successive and desperate sieges, it was finally taken by the parliamentary army in 1649, when it was unroofed and demolished by order of parliament. This castle has been the scene of various tragical events in English history. In the reign of Edward II., Thomas, earl of Lancaster, was brought a prisoner here, and detained till the day of his execution. Richard II. was confined, and eventually murdered here; and in it also Anthony Woodville, Earl Rivers, Richard Lord Grey, Sir Thomas Vaughan, and Sir Richard Hawse, were put to death by order of Richard III., without even the form of a trial.

PONTOISE (an. *Briva Isaræ*), a town of France, dép. Seine-et-Oise, cap. arrond., on the Oise, where it is joined by the Viosne, 20 m. N. Versailles, on the railway from Paris to Amiens. Pop. 6,065 in 1861. The town stands upon an abrupt rocky hill, and was formerly surrounded with walls, portions of which still exist. The lower part of the town is tolerably well built and paved, but has no building of importance except a new and good hospital. The rivers here turn numerous flour-mills; and in addition to these Pontoise has iron and copper works, tanneries, and manufactures of watches, jewellery, and cotton yarn. It was frequently taken and retaken in the wars between England and France; and the parliament of Paris sat here several times during the 17th and 18th centuries.

PONT-ST. ESPR.T, a town of France, dép. Gard, cap. cant., on the Rhine, 31 m. NNE. Nimes. Pop. 5,123 in 1861. The town derives its name from its famous bridge over the river, constructed between 1265 and 1309, 875 yds. in length; it has 23 arches, but is only about 12 ft. in breadth. It is kept in perfect repair, and has been made practicable for carriages. The town, which is ill-built, with narrow, winding streets, has a small port on the Rhone, and a considerable traffic in corn, wine, oil, and silk.

PONTYPOOL (corrupted from *Pont ap Howell*), a market town and township of England, par. Trevethin, hund. Abergavenny, co. Monmouth, 15½ m. SW. Monmouth, and 182 m. W. London by Great Western railway. Pop. of town, 4,661 in 1861. Area of par. and township, 10,460 acres. The town, occupying the side of a steep hill, near a rivulet trib. to the Usk, and nearly surrounded on all sides by mountains, is large and straggling, with two principal streets, lined with neat houses and numerous shops. The church, on an eminence near the town, has an embattled square tower; and there are two chapels of ease, besides places of worship for Wesleyan Methodists and Independents, with attached Sunday schools.

Pontypool was formerly celebrated for its manufacture of japanned goods, introduced by Thomas Allgood, their inventor, in the reign of Charles II.; but this branch of industry has greatly declined, owing to the successful competition of Birmingham, which now nearly monopolises the trade. Its present importance is derived from the iron and tin mines in the surrounding district, and from the iron-works, situated a little SW. from the town, and conducted upon a very large scale. It is connected by railway and by canal with Newport, its shipping-place for the produce of the mines. Petty sessions for the hund. are held here. Markets, on Saturday, and cattle fairs on the last Monday of each month, besides others, April 22, July 5, and Oct. 16.

Pontypool Park, the seat of the Hanbury family, is at a short distance NE. the town; it is finely wooded with oak and other forest trees, and the house, on a perpendicular cliff above the Avon-Llwyd, commands a good view of the surrounding country.

POOLE, a parl. and mun. bor., sea-port, market-town, and par. of England, and a co. of itself, with separate jurisdiction, on a peninsula on the N. side of the extensive and almost landlocked harbour, whence it derives its name, 20 m. E. Dorchester, 97 m. WSW. London by road, and 122 m. by London and South Western railway. Pop. of bor. 9,759 in 1861. The town consists of several streets intersecting each other at different angles, the principal running in a NE. direction through the market-place, in which is the town-hall, a convenient building, with attached shambles. The modern houses are generally substantial, and regularly built; but the older parts of the town have a mean appearance. The parish church is of modern erection. The Wesleyan Methodists and Independents have places of worship, and the town has Sunday schools, a free grammar school, several charity schools, and 2 or 3 well-endowed almshouses. There is a small gaol, and the par. workhouse has been formed into a union with 7 other pars. Several vessels from the port are engaged in the Newfoundland fisheries; besides which the town has a large and increasing coasting trade, the exports being principally Purbeck clay (for the Staffordshire potteries) in exchange for coal. The port has also a considerable foreign trade: there belonged to it in January, 1864, 47 sailing vessels under 50, and 64 above 50 tons, besides one steamer of 22 tons. The gross customs duties amounted to 5,634 in 1863. The entrance to Poole harbour, about ¼ m.

Digitized by Google

in width, has a shifting bar, over which there are seldom more than 15 ft., even at high water. Vessels drawing 14 ft. water may, however, come up to the quays. It is a considerable and singular advantage to Poole harbour, that the tide ebbs and flows twice in 12 hours. It first flows regularly 6 hours, and ebbs for 1½ hour: it then flows for 1½ hour, and ebbs during the remaining 3 hours. The second flood seems to arise from the peculiar situation of the entrance; for, being in a bay facing the E., the tide of ebb from between the Isle of Wight and the main falls into that bay, forcing its way so as to raise the water for 1½ hour, at which period the water without the bar, by its falling to a lower level than that within, produces a second ebb till low water. Near the mouth of the harbour is a bank, from which large quantities of oysters are taken, to be fattened in the creeks of Essex and Kent.

Poole, which claims to be a bor. by prescription, has received several new charters, the principal being in the 10 Eliz. Under the Mun. Reform Act, it is divided into two wards, and is governed by a mayor, 5 aldermen, and 18 councillors. The bor. has returned 2 mems. to the House of Commons since the reign of Edward III., the right of election down to the Reform Act being in the members of the corporation, resident and non-resident. The electoral limits were enlarged as above mentioned by the Boundary Act; and in 1865 it had 566 reg. electors. Markets on Monday and Thursday; fairs, May 1 and Nov. 2.

END OF THE THIRD VOLUME.

00568845

LONDON
PRINTED BY SPOTTISWOODE AND CO.
NEW-STREET SQUARE

Digitized by Google

Digitized by Google

Digitized by Google

Digitized by Google

Digitized by Google